BASE LISTING DOCUMENT DATED 30 MAY 2023

If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

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Non-collateralised Structured Products Base Listing Document relating to Structured Products to be issued by

MACQUARIE BANK

MACQUARIE BANK LIMITED

(ABN 46 008 583 542)

(incorporated under the laws of Australia)

This document, for which we accept full responsibility, includes particulars given in compliance with the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the “**Listing Rules**”) for the purpose of giving information with regard to Macquarie Bank Limited (the “**Issuer**”, “**Macquarie Bank**”, “**we**” or “**us**”) and our standard warrants (“**Warrants**”), callable bull/bear contracts (“**CBBCs**”) and other structured products (together, the “**Structured Products**”) to be listed on the Stock Exchange from time to time. This document may be updated and/or amended from time to time by way of addenda.

We, having made all reasonable enquiries, confirm that to the best of our knowledge and belief the information contained in this document is accurate and complete in all material respects and not misleading or deceptive, and there are no other matters the omission of which would make any statement herein or this document misleading.

The Structured Products involve derivatives. Do not invest in them unless you fully understand and are willing to assume the risks associated with them.

The Structured Products are complex products. You should exercise caution in relation to them. Investors are warned that the price of the Structured Products may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment. Prospective purchasers should therefore ensure that they understand the nature of the Structured Products and carefully study the risk factors set out in this document and, where necessary, seek professional advice, before they invest in the Structured Products.

The Structured Products constitute general unsecured contractual obligations of us as the Issuer and of no other person and will rank equally among themselves with all our other unsecured obligations (save for those obligations preferred by law) upon liquidation. If you purchase the Structured Products, you are relying upon the creditworthiness of us, and have no rights under the Structured Products against (a) the company which has issued the underlying securities; (b) the fund which has issued the underlying securities, or its trustee (if applicable) or manager; or (c) the index compiler of any underlying index. If we become insolvent or default on our obligations under the Structured Products, you may not be able to recover all or even part of the amount due under the Structured Products (if any).

Other than Macquarie Bank Limited ABN 46 008 583 542 (Macquarie Bank Limited), any Macquarie Group entity noted in this document is not an authorised deposit taking institution for the purposes of the Banking Act 1959 (Commonwealth of Australia). The Structured Products do not represent protected accounts for the purposes of the financial claim scheme or deposits of Macquarie Bank Limited or any other member of the Macquarie Group. Macquarie Bank Limited does not guarantee the payment or repayment of any moneys owing to the Structured Products holders or the return of any principal invested or any particular rate of return or otherwise provide assurance in respect of the obligations of that entity, unless noted otherwise. The holding of the Structured Products is subject to investment risk, including possible delays in repayment and loss of income and principal invested. Structured Products do not represent deposits or liabilities in relation to protected accounts with Macquarie Bank Limited.

Sponsor
Macquarie Capital Limited

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IMPORTANT INFORMATION

What is this document about?

This document is for information purposes only and does not constitute an offer, an advertisement or an invitation to the public to subscribe for or to acquire any Structured Products.

What documents should you read before investing in the Structured Products?

A launch announcement and supplemental listing document will be issued in respect of each series of Structured Products, which will include detailed commercial terms of the relevant series. You must read this document (including any addendum to this document to be issued from time to time), together with such launch announcement and supplemental listing document (including any addendum to such launch announcement and supplemental listing document to be issued from time to time) (together, the "**Listing Documents**") before investing in any Structured Product. You should carefully study the risk factors set out in the Listing Documents.

What are our credit ratings?

Our long term credit ratings as of 29 May 2023 were:

Rating agency	*Credit ratings**
S&P Global Ratings ("**S&P**")	A+ (stable outlook)
Moody's Investors Service, Inc. ("**Moody's**")	A2 (positive outlook)

* Credit ratings are subject to change or withdrawal at any time within each rating agency's sole discretion. You should conduct your own research using publicly available sources to obtain the latest information with respect to our ratings from time to time.

Our credit ratings are only an assessment by the rating agencies of our overall financial capacity to pay our debts.

A+ is among the top three major credit rating categories and is the fifth highest investment-grade ranking of the ten investment-grade ratings (including + or - modifiers) assigned by S&P.

A2 is among the top three major credit rating categories and is the sixth highest investment-grade ranking of the ten investment-grade ratings (including 1, 2 and 3 modifiers) assigned by Moody's.

Please refer to the brief guide in Appendix 4 to this document for more information about credit ratings.

Rating agencies usually receive a fee from the companies that they rate. When evaluating our creditworthiness, you should not solely rely on our credit ratings because:

(a) a credit rating is not a recommendation to buy, sell or hold the Structured Products;

(b) ratings of companies may involve difficult-to-quantify factors such as market competition, the success or failure of new products and markets and managerial competence;

(c) a high credit rating is not necessarily indicative of low risk. Our credit ratings as of the above date are for reference only. Any downgrading of our ratings could result in a reduction in the value of the Structured Products;

(d) a credit rating is not an indication of the liquidity or volatility of the Structured Products; and

(e) a credit rating may be downgraded if the credit quality of the Issuer declines or by other events that are not related to Macquarie Bank and/or its controlled entities (the "**MBL Group**").

The Structured Products are not rated.

Are we regulated by the Hong Kong Monetary Authority as referred to in Rule 15A.13(2) or by the Securities and Futures Commission as referred to in Rule 15A.13(3) of the Listing Rules?

The Issuer is not regulated by the Hong Kong Monetary Authority referred to in Rule 15A.13(2) or the Securities and Futures Commission referred to in Rule 15A.13(3). We are regulated by, among others, the Australian Prudential Regulation Authority.

Are we subject to any litigation?

There are currently claims against us and some of our subsidiaries and affiliates (the "**Group**"). Details of these claims or the Group's position in respect of them are confidential. Where necessary, appropriate provisions have been made in the financial statements. Save as disclosed in this document, the Group does not consider that the outcome of any such claims known to exist at this date, either individually or in aggregate, is likely to have a material effect on its operations or financial position.

Authorisation for the issue of the Structured Products

The issue of the Structured Products was authorised by our board of directors on 29 August 2002.

Has our financial position changed since last financial year-end?

There has been no material adverse change in our financial or trading position since 31 March 2023. You may access our latest publicly available financial information by visiting our website at *www.macquarie.com.*

Do you need to pay any transaction cost?

The Stock Exchange charges a trading fee of 0.00565 percent, the Securities and Futures Commission charges a transaction levy of 0.0027 percent and the Financial Reporting Council charges a transaction levy of 0.00015 percent for each transaction effected on the Stock Exchange payable by each of the seller and the buyer and calculated on the value of the consideration for the Structured Products. The levy for the investor compensation fund is currently suspended.

Do you need to pay any tax?

Taxation in Hong Kong

An investor would only be subject to Hong Kong profits tax if (a) it were to carry on a trade, profession or business in Hong Kong and (b) profits from that trade, profession or business were to arise in or be derived from Hong Kong. Hong Kong profits tax will not be payable in respect of profits which are capital in nature.

You do not need to pay any Hong Kong stamp duty in respect of purely cash settled Structured Products.

Where Hong Kong stock is to be delivered, stamp duty will normally be payable since any person who effects a sale or purchase of "Hong Kong Stock", as defined in the Stamp Duty Ordinance (Cap 117, The Laws of Hong Kong), whether as principal or as agent and whether such transaction is effected in Hong Kong or elsewhere, is required to execute a contract note evidencing such sale or purchase and have such contract note stamped with Hong Kong stamp duty.

Where the underlying shares are not Hong Kong stock (as defined in the Stamp Duty Ordinance) but are shares listed in other jurisdictions, stamp duty and other taxes may be payable on the transfer of such shares under the laws of such other jurisdictions.

Placing, sale and grey market dealings

No offers, sales, re-sales, transfers or deliveries of any Structured Products, or distribution of any offering material relating to the Structured Products may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and which will not impose any obligation on us. See the section "Placing and Sale" for further information.

Following the launch of a series of Structured Products, we may place all or part of that series with our related party.

The Structured Products may be sold to investors in the grey market in the period between the launch date and the listing date. We will report any dealings in Structured Products by us and/or any of our subsidiaries or associated companies in the grey market to the Stock Exchange on the listing date through the website of the HKEX at *http://www.hkexnews.hk.*

Where can you read the relevant documents?

Copies of the following documents are available on the website of the HKEX at *http://www.hkexnews.hk* and our website at *www.warrants.com.hk*:

(a) each of the following documents (in separate English and Chinese versions), including:

- this document (and any addendum to this document), which include our latest audited financial statements and any interim financial statements; and

- the relevant launch announcement and supplemental listing document as long as the relevant series of Structured Products is listed on the Stock Exchange; and

(b) the consent letter issued by PricewaterhouseCoopers ("**Auditor**").

以上各文件可於香港交易所披露易網站(*www.hkexnews.hk*)以及本公司網站(*www.warrants.com.hk*)瀏覽。

Please refer to the base listing document dated 30 May 2022 for our annual financial statements and independent audit report in 2022.

Has the Auditor consented to the inclusion of its report in this document?

Our Auditor has given and has not withdrawn its written consent to the inclusion of its report dated 5 May 2023 relating to our financial statements for the year ended 31 March 2023 in this document and/or the references to its name in this document, in the form and context in which they are included. The independent audit report was not prepared for incorporation into this document. The Auditor does not hold our shares or shares in any member of our group, nor does it have the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for our securities or securities of any member of our group.

Authorised Representatives

We have appointed Ashley Miles and Kathleen Kan (c/o Macquarie Capital Limited, Level 22, One International Finance Centre, 1 Harbour View Street, Central, Hong Kong) to accept services of process and notices pursuant to the Listing Rules.

How can you get further information about Macquarie Bank or the Structured Products?

You may visit *www.macquarie.com* and/or *www.warrants.com.hk* to obtain further information about us and/or the Structured Products.

Governing law of the Structured Products

All contractual documentation for the Structured Products will be governed by, and construed in accordance with, the laws of Hong Kong.

The Listing Documents are not the sole basis for making an investment decision

The Listing Documents do not take into account your investment objectives, financial situation or particular needs. Nothing in the Listing Documents should be construed as a recommendation by us or our affiliates to invest in the Structured Products or the underlying asset of the Structured Products.

No person has been authorised to give any information or to make any representations other than those contained in this document in connection with the Structured Products, and, if given or made, such information or representations must not be relied upon as having been authorised by us. HKEX, the Stock Exchange and HKSCC have made no assessment of, nor taken any responsibility for, our financial soundness or the merits of investing in any Structured Products, nor have they verified the accuracy or the truthfulness of statements made or opinions expressed in this document.

This document has not been reviewed by the Securities and Futures Commission. You are advised to exercise caution in relation to the offer of the Structured Products.

Capitalised terms

Unless otherwise specified, capitalised terms used in this document have the meanings set out in the General Conditions set out in Appendix 1 and the Product Conditions applicable to the relevant series of Structured Products set out in Appendix 2 and Appendix 3 (together, the “**Conditions**”).

GENERAL

No action has been or will be taken by us that would permit a public offering of any series of Structured Products or possession or distribution of any offering material in relation to any Structured Product in any jurisdiction (other than Hong Kong) where action for the purpose is required.

UNITED STATES OF AMERICA

Each series of Structured Products has not been, and will not be, registered under the Securities Act. Subject to certain exceptions, Structured Products or interests therein, may not at any time be offered, sold, resold, transferred or delivered, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. person or to others for offering, sale or resale in the United States or to any such U.S. person. Offers and sales of Structured Products, or interests therein, in the United States or to U.S. persons would constitute a violation of United States securities laws unless made in compliance with the registration requirements of the Securities Act or pursuant to an exemption therefrom. No person will offer, sell, re-sell, transfer or deliver any Structured Products within the United States or to U.S. persons, except as permitted by the base placing agreement between us and the Sponsor, acting as manager. As used herein, "**United States**" means the United States of America (including the States and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction; and "**U.S. person**" means any national or resident of the United States, including any corporation, partnership or other entity created or organised in or under the laws of the United States or of any political subdivision thereof, any estate or trust the income of which is subject to United States income taxation regardless of its source, and any other U.S. person as such term is defined in Regulation S under the Securities Act.

In addition, until 40 days after the commencement of the offering, an offer, sale, re-sale, transfer or delivery of Structured Products within the United States by a dealer that is not participating in the offering may violate the registration requirements of the Securities Act.

EUROPEAN ECONOMIC AREA

In relation to each Member State of the European Economic Area which has implemented the Prospectus Regulation, each dealer has represented and agreed, and each further dealer appointed in respect of the Structured Products will be required to represent and agree that, it has not offered, sold or otherwise made available and will not offer, sell, or otherwise make available any Structured Products which are the subject of the offering as contemplated by this Base Listing Document to any retail investor in the European Economic Area. Consequently no key information document required by Regulation (EU) No 1286/2014 (the "**PRIIPs Regulation**") for offering or selling the Structured Products or otherwise making them available to retail investors in the European Economic Area has been prepared and therefore offering or selling the Structured Products or otherwise making them available to any retail investor in the European Economic Area may be unlawful under the PRIIPs Regulation.

For the purposes of this provision:

(a) the expression "**retail investor**" means a person who is one (or more) of the following:

   (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

   (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the Insurance Distribution Directive), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

   (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended and superseded, the "**Prospectus Regulation**"); and

(b) the expression "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Structured Products to be offered so as to enable an investor to decide to purchase or subscribe the Structured Products.

UNITED KINGDOM

Each dealer has represented and agreed, and each further dealer appointed in respect of the Structured Products will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Structured Products which are the subject of the offering contemplated by this Base Listing Document to any retail investor in the United Kingdom. Consequently no key information document required by the PRIIPs Regulation as it by virtue of the European Union (Withdrawal) Act 2018 (the "**EUWA**") forms part of domestic law (the "**UK PRIIPs Regulation**") for offering or selling the Structured Products or otherwise making them available to retail investors in the United Kingdom has been prepared and therefore offering or selling the Structured Products or otherwise making them available to any retail investor in the United

Kingdom may be unlawful under the UK PRIIPs Regulation.

For the purposes of this provision:

(a) the expression "**retail investor**" means a person who is one (or more) of the following:

(i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or

(ii) a customer within the meaning of the provisions of the Financial Services and Markets Act, as amended (the "**FSMA**") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or

(iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA; and

(b) the expression an "**offer**" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Structured Products to be offered so as to enable an investor to decide to purchase or subscribe for the Structured Products.

Each dealer has represented and agreed, and each further dealer appointed in respect of the Structured Products will be required to represent and agree, that:

(a) in respect of Structured Products having a maturity of less than one year: (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and (ii) it has not offered or sold and will not offer or sell any Structured Products other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Structured Products would otherwise constitute a contravention of Section 19 of the FSMA, by us;

(b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of the Structured Products in circumstances in which section 21(1) of the FSMA does not apply to the Issuer; and

(c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Structured Products in, from or otherwise involving the United Kingdom.

AUSTRALIA

This document is not a prospectus, product disclosure statement or any other disclosure document for the purposes of the Corporations Act 2001 (Cth) (the "**Act**"). This document has not been, and will not be, lodged with the Australian Securities and Investments Commission, ASX Limited or any other government agency in Australia. Each dealer will be required to represent and agree that, unless the applicable final terms otherwise provides, it:

(a) has not offered or invited applications, and will not make any offer, or invite applications, for the issue, sale or purchase of any Structured Product in Australia (including an offer or invitation which is received by a person in Australia); and

(b) has not distributed or published, and will not distribute or publish, this document, any addendum to this document and the relevant launch announcement and supplemental listing document or any other offering material or advertisement relating to any Structured Product in Australia,

Unless:

(a) the offeree or invitee is a "wholesale client", "sophisticated investor" or "professional investor" (as defined in the Act);

(b) the minimum aggregate consideration payable by each offeree or invitee is at least A$500,000 (or its equivalent in other currencies but disregarding moneys lent by the offeror or its associates); or

(c) the offer or invitation otherwise does not require disclosure to investors in accordance with Part 6D.2 or Chapter 7 of the Act.

Section 708(19) of the Act provides that an offer of debentures for issue or sale does not need disclosure to investors under Part 6D.2 of the Act if the issuer is an Australian authorised deposit-taking institution ("**ADI**"). As at the date of this document, we are an ADI.

OVERVIEW OF WARRANTS

What is a Warrant?

A Warrant is a type of derivative warrant.

A derivative warrant linked to a share of a company, a unit or share of a fund, an index or other asset (each an "**Underlying Asset**") is an instrument which gives the holder a right to "buy" or "sell" the Underlying Asset at, or derives its value by reference to, a pre-set price or level called the Exercise Price or Strike Level on the Expiry Date. It usually costs a fraction of the value of the Underlying Asset.

A derivative warrant may provide leveraged return to you (but conversely, it could also magnify your losses).

How and when can you get back your investment?

Our Warrants are European style warrants. That means they can only be exercised on the Expiry Date. A warrant will, upon exercise on the Expiry Date, entitle the holder to a cash amount called the "**Cash Settlement Amount**" (if positive) according to the relevant Product Conditions of that warrant.

You will receive the Cash Settlement Amount (if any) less any Exercise Expenses upon settlement at expiry. If the Cash Settlement Amount is equal to or less than the Exercise Expenses, no amount is payable to you upon expiry.

How do our Warrants work?

The potential payoff of the Warrant is calculated by us by reference to the difference between:

(a) for a Warrant linked to a share or a unit, the Exercise Price and the Average Price; and

(b) for a Warrant linked to an index, the Strike Level and the Closing Level.

Call warrants

A call warrant is suitable for an investor holding a bullish view of the price or level of the Underlying Asset during the term of the warrant.

A call warrant will be exercised if the Average Price/Closing Level is greater than the Exercise Price/Strike Level (as the case may be). The more the Average Price/Closing Level exceeds the Exercise Price/Strike Level (as the case may be), the higher the payoff upon expiry. If the Average Price/Closing Level is at or below the Exercise Price/Strike Level (as the case may be), an investor in the call warrant will lose all of his investment.

Put warrants

A put warrant is suitable for an investor holding a bearish view of the price or level of the Underlying Asset during the term of the warrant.

A put warrant will be exercised if the Average Price/Closing Level is below the Exercise Price/Strike Level (as the case may be). The more the Average Price/Closing Level is below the Exercise Price/Strike Level (as the case may be), the higher the payoff upon expiry. If the Exercise Price/Strike Level is at or below the Average Price/Closing Level (as the case may be), an investor in the put warrant will lose all of his investment.

Other types of warrants

The launch announcement and supplemental listing document applicable to other types of warrants will specify the type of such warrants.

Where can you find the Product Conditions applicable to our Warrants?

You should review the Product Conditions applicable to each type of the Warrants before your investment.

The Product Conditions applicable to each type of our Warrants are set out in Parts A to C of Appendix 2 (as may be supplemented by any addendum or the relevant launch announcement and supplemental listing document).

What are the factors determining the price of a derivative warrant?

The price of a warrant generally depends on the prevailing price or level of the Underlying Asset. However, throughout the term of a warrant, its price will be influenced by a number of factors, including:

(a) the Exercise Price or Strike Level (as the case may be);

(b) the value and volatility of the price or level of the Underlying Asset (being a measure of the fluctuation in the price or level of the Underlying Asset over time);

(c) the time remaining to expiry: generally, the longer the remaining life of a warrant, the greater its value;

(d) the interim interest rates and expected dividend payments or other distributions on the Underlying

Asset or on any components comprising the underlying index (as the case may be);

(e) the liquidity of the Underlying Asset or of the futures contracts relating to the underlying index (as the case may be);

(f) the supply and demand for the warrant;

(g) our related transaction cost; and/or

(h) our creditworthiness.

What is your maximum loss in warrants?

Your maximum loss in warrants will be your entire investment amount plus any transaction costs.

How can you get information about the Warrants after issue?

You may visit the HKEX website at *https://www.hkex.com.hk/products/securities/structured-products/overview?sc_lang=en* to obtain further information on our Warrants or any notice given by us or the Stock Exchange in relation to our Warrants.

OVERVIEW OF CBBCS

What are CBBCs?

CBBCs are a type of Structured Products that track the performance of an Underlying Asset. CBBCs can be issued on different types of Underlying Assets as prescribed by the Stock Exchange from time to time, including:

(a) shares listed on the Stock Exchange;

(b) Hang Seng Index, Hang Seng China Enterprises Index, Hang Seng TECH Index and Hang Seng China H-Financials Index;

(c) unit trusts or exchange traded funds listed on the Stock Exchange; and/or

(d) overseas securities, indices, currencies or commodities (such as oil, gold and platinum).

A list of eligible Underlying Assets for CBBCs is available on the website of the HKEX at *https://www.hkex.com.hk/Products/Securities/Structured-Products/Eligible-Underlying-Assets?sc_lang=en*.

CBBCs are issued either as bull CBBCs or bear CBBCs, allowing you to take either bullish or bearish positions on the Underlying Asset. Bull CBBCs are designed for investors who have an optimistic view on the Underlying Asset. Bear CBBCs are designed for investors who have a pessimistic view on the Underlying Asset.

CBBCs have a mandatory call feature (the "**Mandatory Call Event**") and, subject to the limited circumstances set out in the relevant Product Conditions in which a Mandatory Call Event may be reversed, we must terminate our CBBCs upon the occurrence of a Mandatory Call Event. See "What are the mandatory call features of CBBCs?" below for further information.

There are 2 categories of CBBCs, namely:

(a) Category R CBBCs; and

(b) Category N CBBCs.

Your entitlement following the occurrence of a Mandatory Call Event will depend on the category of the CBBCs. See "Category R CBBCs vs. Category N CBBCs" below for further information.

If no Mandatory Call Event occurs, the CBBCs may be exercised automatically on the Expiry Date by payment of a Cash Settlement Amount (if any) on the Settlement Date. The Cash Settlement Amount (if any) payable at expiry represents the difference between the Closing Price/Closing Level of the Underlying Asset on the Valuation Date and the Strike Price/Strike Level. See "Category R CBBCs vs. Category N CBBCs" below.

What are the mandatory call features of CBBCs?

Mandatory Call Event

Subject to the limited circumstances set out in the relevant Product Conditions in which a Mandatory Call Event may be reversed, we must terminate the CBBCs if a Mandatory Call Event occurs. A Mandatory Call Event occurs if the Spot Price/Spot Level of the Underlying Asset is:

(a) at or below the Call Price/Call Level (in the case of a bull CBBC); or

(b) at or above the Call Price/Call Level (in the case of a bear CBBC),

at any time during the Observation Period.

The Observation Period starts from and includes the Observation Commencement Date of the relevant CBBCs and ends on and includes the Trading Day immediately preceding the Expiry Date.

Subject to the limited circumstances set out in the relevant Product Conditions in which a Mandatory Call Event may be reversed and such modification and amendment as may be prescribed by the Stock Exchange from time to time:

(a) all trades in the CBBCs concluded via auto-matching or manually after the time of the occurrence of a Mandatory Call Event; and

(b) where the Mandatory Call Event occurs during a pre-opening session or closing auction session (if applicable), all auction trades in the CBBCs concluded in such session and all manual trades concluded after the end of the pre-order matching period in such session,

will be invalid and will be cancelled, and will not be recognised by us or the Stock Exchange.

The time at which a Mandatory Call Event occurs will be determined by reference to:

(a) in respect of CBBCs over single equities listed on the Stock Exchange or CBBCs over an exchange traded fund ("**ETF**"), the Stock Exchange's automatic order matching and execution system time at which the Spot Price is at or below the Call Price (in the case of a bull CBBC) or is at or above the Call Price (in the case of a bear CBBC); or

(b) in respect of CBBCs over index, the time the relevant Spot Level is published by the Index Compiler at which the Spot Level is at or below the Call Level (in the case of a bull CBBC) or is at or above the Call Level (in the case of a bear CBBC),

subject to the rules and requirements as prescribed by the Stock Exchange from time to time.

Category R CBBCs vs. Category N CBBCs

The launch announcement and supplemental listing document for the relevant series of CBBCs will specify whether the CBBCs are Category R CBBCs or Category N CBBCs.

"**Category R CBBCs**" refer to CBBCs for which the Call Price/Call Level is different from their Strike Price/Strike Level. In respect of a series of Category R CBBCs, you may receive a cash payment called the Residual Value upon the occurrence of a Mandatory Call Event. The amount of the Residual Value payable (if any) is calculated by reference to:

(a) in respect of a bull CBBC, the difference between the Minimum Trade Price/Minimum Index Level of the Underlying Asset and the Strike Price/Strike Level; and

(b) in respect of a bear CBBC, the difference between the Strike Price/Strike Level and the Maximum Trade Price/Maximum Index Level of the Underlying Asset.

"**Category N CBBCs**" refer to CBBCs for which the Call Price/Call Level is equal to their Strike Price/Strike Level. In respect of a series of Category N CBBCs, you will not receive any cash payment following the occurrence of a Mandatory Call Event.

You must read the relevant Product Conditions and the relevant launch announcement and supplemental listing document to obtain further information on the calculation formula of the Residual Value applicable to Category R CBBCs.

If a Mandatory Call Event occurs, you may lose all of your investment in a particular series of CBBCs if:

(a) in the case of a series of bull CBBCs, the Minimum Trade Price/Minimum Index Level of the Underlying Asset is equal to or less than the Strike Price/Strike Level; or

(b) in the case of a series of bear CBBCs, the Maximum Trade Price/Maximum Index Level of the Underlying Asset is equal to or greater than the Strike Price/Strike Level.

If no Mandatory Call Event occurs, you may lose all of your investment in a particular series of CBBCs if:

(a) in the case of a series of bull CBBCs, the Closing Price/Closing Level is equal to or less than the Strike Price/Strike Level; or

(b) in the case of a series of bear CBBCs, the Closing Price/Closing Level is equal to or greater than the Strike Price/ Strike Level.

How is the funding cost calculated?

The issue price of a CBBC represents the difference between the initial reference Spot Price/Spot Level of the Underlying Asset and the Strike Price/Strike Level, plus the applicable initial funding cost as at the launch date.

The initial funding cost applicable to each series of CBBCs will be specified in the relevant launch announcement and supplemental listing document and will fluctuate throughout the life of the CBBCs as the funding rate changes from time to time. The funding rate is a rate determined by us based on one or more of the following factors, including but not limited to the Strike Price/Strike Level, the prevailing interest rate, the expected life of the CBBCs, expected notional dividends or distributions in respect of the Underlying Asset and the margin financing provided by us.

Further details about the funding cost applicable to a series of CBBCs will be described in the relevant launch announcement and supplemental listing document.

Do you own the Underlying Asset?

CBBCs convey no interest in the Underlying Asset. We may choose not to hold the Underlying Asset or any derivatives contracts linked to the Underlying Asset. There is no restriction through the issue of the CBBCs on the ability of us and/or our affiliates to sell, pledge or otherwise convey all right, title and interest in any Underlying Asset or any derivatives products linked to the Underlying Asset.

Where can you find the Product Conditions applicable to our CBBCs?

You should review the Product Conditions applicable to each type of the CBBCs before your investment.

The Product Conditions applicable to each type of our CBBCs are set out in Parts A to C of Appendix 3 (as may be supplemented by any addendum or the relevant launch announcement and supplemental listing document).

What are the factors determining the price of a CBBC?

The price of a CBBC tends to follow closely the movement in the value of the Underlying Asset in dollar value (on the assumption of an entitlement ratio of one CBBC to one Underlying Asset).

However, throughout the term of a CBBC, its price will be influenced by a number of factors, including:

(a) the Strike Price/Strike Level and the Call Price/Call Level (as the case may be);

(b) the likelihood of the occurrence of a Mandatory Call Event;

(c) for Category R CBBCs only, the probable range of the Residual Value (if any) payable upon the occurrence of a Mandatory Call Event;

(d) the time remaining to expiry;

(e) the interim interest rates and expected dividend payments or other distributions on the Underlying Asset or on any components comprising the underlying index (as the case may be);

(f) the liquidity of the Underlying Asset or of the futures contracts relating to the underlying index (as the case may be);

(g) the supply and demand for the CBBCs;

(h) the probable range of the Cash Settlement Amount;

(i) our related transaction cost; and/ or

(j) our creditworthiness.

What is your maximum loss in CBBCs?

Your maximum loss in CBBCs will be your entire investment amount plus any transaction costs.

How can you get information about the CBBCs after issue?

You may visit the HKEX website at *https://www.hkex.com.hk/products/securities/structured-products/overview?sc_lang=en* to obtain further information on CBBCs or any notice given by us or the Stock Exchange in relation to our CBBCs.

INFORMATION IN RELATION TO US

MACQUARIE BANK LIMITED

Macquarie Bank Limited is an Australian Prudential Regulation Authority (APRA) regulated Authorised Deposit-taking Institution ("**ADI**") headquartered in Sydney, Australia and is a wholly owned subsidiary of Macquarie Group Limited. Macquarie Bank generates income by operating a diversified set of businesses across different locations and service offerings including asset finance, lending, banking and risk and capital solutions across debt, equity and commodities. Macquarie Bank offers a range of services to government, institutional, corporate and retail clients.

The Banking Group comprises two operating groups: Banking & Financial Services and Commodities and Global Markets. Certain assets of the Credit Markets business and certain activities of the Commodity Markets and Finance business, and some other less financially significant activities are undertaken from within the Non-Banking Group.

The Non-Banking Group consists of Macquarie Capital; Macquarie Asset Management; and those assets and activities in Commodities and Global Markets which are not in the Banking Group, as described above.

The registered office of Macquarie Bank is at Level 6, 50 Martin Place, Sydney, NSW 2000, Australia. Macquarie Bank's principal administrative office is 50 Martin Place, Sydney, NSW 2000, Australia.

Commodities & Global Markets

Commodities and Global Markets (CGM) is a global business offering capital and financing, risk management, market access, physical execution and logistics solutions to its diverse client base across:

Commodities:

- Provides capital and financing, risk management, and physical execution and logistics services across power, gas emissions, oil, resources and agricultural sectors globally. The division also offers commodity-based index products to institutional investors.

Financial Markets:

- Fixed Income & Currencies: Provides currencies and fixed income trading and hedging services as well as financing via securitization, warehousing, seasoning and term financing facilities to a range of corporate and institutional clients globally.

- Futures: Provides a full range of execution, clearing and financing solutions to corporate and institutional clients, providing continuous 24-hour coverage of major markets globally.

- Credit Markets: Operates in the United States and provides asset backed financing solutions for credit originators and credit investors across commercial and residential mortgages, consumer loans, syndicated corporate loans and middle market corporate loans.

- Equity Derivatives and Trading: Issues retail derivatives in key locations, and provides derivative products and equity finance solutions to its institutional client base and conducts risk management and market making activities. Generally, the Equity Derivatives and Trading division's activities, which include sales of retail derivatives, trading, equity finance and capital management, are in the Banking Group.

Asset Finance:

- Delivers a diverse range of tailored finance solutions globally across a variety of industries and asset classes.

Central:

- Develops and manages cross-divisional initiatives. It houses various CGM-wide services including the Chief Operating Officer (COO) teams, Chief Financial Officer (CFO) teams, data, legal and other specialist activities and encompasses non-financial risk functions.

APRA's Actions

On 1 April 2021, APRA announced actions required regarding Macquarie Bank Limited's risk management practices and ability to calculate and report key prudential ratios. APRA increased Macquarie Bank Limited's operational risk capital requirement and made adjustments to requirements for certain liquidity prudential ratios, effective from 1 April 2021. The actions relate to specific intra-group funding arrangements as well as breaches of APRA's reporting standards on liquidity between 2018 and 2020. APRA noted that the breaches are historical and do not impact the current overall soundness of Macquarie Group's capital and liquidity positions. On 22 October 2021, we published restated historical Macquarie Bank Limited Pillar 3 disclosures for the period from March 2018 to June 2021. As at 31 March 2023, Macquarie Bank Limited's CET1 ratio was 13.7% and Leverage ratio was 5.2%, comfortably exceeding APRA's Basel III requirements.

We have been working with APRA on a remediation plan that strengthens Macquarie Bank Limited's governance, culture, structure, and remuneration to ensure full and ongoing compliance with prudential standards.

German Litigation and Regulatory Matters

We were one of over 100 financial institutions involved in the German dividend trading market. Nearly a dozen criminal trials related to cum-ex have been or are being prosecuted against individuals in German courts and there have been convictions. Our historical involvement in that market included short selling-related activities and acting as a lender to third parties who undertook dividend trading.

The Cologne Prosecutor's Office is investigating our historical activities. Under German law, companies cannot be criminally prosecuted, but they can be added as ancillary parties to the trials of certain individuals. Ancillary parties may be subject to confiscation orders requiring the disgorgement of profits.

As part of their ongoing industry-wide investigation, the German authorities have designated as suspects approximately 100 current and former Macquarie Group staff members, including the current Macquarie Group CEO. Most of these individuals are no longer at the Macquarie Group. Macquarie Group has been responding to the German authorities' requests for information about its historical activities and expects former and current Macquarie Group employees to participate in interviews with German authorities over the coming months.

Since 2018, a number of German civil claims have been brought against us by investors in a group of independent investment funds financed by us to undertake German dividend trading in 2011, who seek total damages of approximately €59 million. The funds were trading shares around the dividend payment dates where investors were seeking to obtain the benefit of dividend withholding tax credits. The investors' credit claims were refused and there was no loss to the German revenue authority. We strongly dispute these claims noting that we did not arrange, advise or otherwise engage with the investors, who were high net-worth individuals with their own advisers. Many, if not all, had previously participated in similar transactions.

Macquarie Group has provided for these matters.

DIRECTORS AND COMPANY SECRETARIES

Directors' Qualifications and Membership of Other Board Committees

Glenn R Stevens AC
BEc (Hons) (Sydney), MA (Econ) (UWO)
Independent Chair since 10 May 2022
Independent Voting Director since November 2017
Member of the Board Conflicts Committee

Stuart D Green
BA (Hons)(UCL), MBA (CUL Business School), FCA, FCT
Managing Director and Chief Executive Officer since July 2021
Member of the Board Conflicts Committee

Shemara R Wikramanayake
BCom, LLB (UNSW)
Executive Voting Director since August 2018

Managing Director and Chief Executive Officer of Macquarie Group Limited since December 2018

Jillian R Broadbent AC
BA (Maths & Economics) (Sydney)
Independent Voting Director since November 2018
Chair of the Board Remuneration Committee

Philip M Coffey
BEc (Hons) (Adelaide), GAICD, SF Finsia
Independent Voting Director since August 2018
Chair of the Board Risk Committee
Member of the Board Governance and Compliance Committee

Michael J Coleman
MCom (UNSW), FCA, FCPA, FAICD Life
Independent Voting Director since November 2012
Member of the Board Audit Committee
Member of the Board Conflicts Committee
Member of the Board Governance and Compliance Committee
Member of the Board Risk Committee

Michelle A Hinchliffe
BCom (UQ), FCA, ACA
Independent Voting Director since March 2022
Chair of the Board Audit Committee
Member of the Board Governance and Compliance Committee

Rebecca J McGrath
BTP (Hons) (UNSW), MAppSc (ProjMgt) (RMIT), FAICD
Independent Voting Director since January 2021
Member of the Board Governance and Compliance Committee
Member of the Board Remuneration Committee
Member of the Board Risk Committee

Mike Roche
BSc (UQ), GAICD, FIA (London), FIAA
Independent Voting Director since January 2021
Member of the Board Audit Committee
Member of the Board Remuneration Committee
Member of the Board Risk Committee

Nicola M Wakefield Evans AM
BJuris/BLaw (UNSW), FAICD
Independent Voting Director since February 2014
Chair of the Board Governance and Compliance Committee
Member of the Board Audit Committee
Member of the Board Risk Committee

Ian M Saines
BCom (Economics) (UNSW), FAICD
Independent Voting Director since June 2022
Chair of the Board Conflicts Committee

Member of the Board Remuneration Committee
Member of the Board Risk Committee

The Company Secretary of Macquarie Bank is Simone Kovacic. Olivia Shepherd is the Assistant Company Secretary of Macquarie Bank.

The business address of each Voting Director and the Company Secretary is Level 6, 50 Martin Place, Sydney, NSW 2000, Australia.

As at 31 March 2023, Macquarie Bank Limited employed over 15,990 staff globally.

RISK FACTORS

Not all of the risk factors described below will be applicable to a particular series of Structured Products. Please consider all risks carefully prior to investing in any Structured Products and consult your professional independent financial adviser and legal, accounting, tax and other advisers with respect to any investments in the Structured Products. Please read the following section together with the risk factors set out in the relevant launch announcement and supplemental listing document.

General risks relating to us

Non-collateralised structured products

The Structured Products are not secured on any of our assets or any collateral. Each series of Structured Products constitutes our general unsecured contractual obligations and of no other person and will rank equally with our other unsecured contractual obligations and unsecured and unsubordinated debt. At any given time, the number of our Structured Products outstanding may be substantial.

Repurchase of our Structured Products

Our Group may repurchase the Structured Products from time to time in the private market or otherwise at a negotiated price or the prevailing market price at our discretion. You should not make any assumption as to the number of Structured Products in issue for any particular series at any time.

Our creditworthiness

If you purchase our Structured Products, you are relying upon our creditworthiness and have no rights under these products against:

(a) any company which issues the underlying shares;

(b) the fund which issues the underlying securities or its trustee (if applicable) or manager; or

(c) any index compiler of the underlying index.

We do not guarantee the repayment of your investment in any Structured Product.

Any downgrading of our rating by rating agencies such as S&P and Moody's could result in a reduction in the value of the Structured Products.

No deposit liability or debt obligation

We are obliged to deliver to you the Cash Settlement Amount (if any) under the Conditions upon expiry. We do not intend (expressly, implicitly or otherwise) to create a deposit liability or a debt obligation of any kind by the issue of any Structured Product.

Structured Products are not bank deposits and they are not liabilities in relation to protected accounts with Macquarie Bank Limited. They are unsecured obligations of Macquarie Bank, and in the event of the winding up of Macquarie Bank, they would rank equally with other unsecured obligations and liabilities of Macquarie Bank, in the order of their priority. Section 13A(3) of the Banking Act provides that if Macquarie Bank becomes unable to meet its obligations or suspends payment, its assets in Australia are to be available to satisfy specified liabilities in priority to all its other liabilities (including its obligations under the Structured Products). The specified liabilities include first, certain obligations of Macquarie Bank to APRA in respect of amounts payable by APRA to holders of protected accounts and any administration costs incurred by APRA. Then, as the next priority, other liabilities of Macquarie Bank in Australia in relation to protected accounts that account-holders keep with Macquarie Bank. Following this any debts that Macquarie Bank owes to the Reserve Bank of Australia and any liabilities under an industry support contract (certified under section 11CB of the Banking Act) and then, any other liabilities, in the order of their priority.

Conflicts of interest

The Group is a diversified financial institution with relationships in countries around the world. The Group engages in a wide range of commercial and investment banking, brokerage, funds management, hedging transactions and investment and other activities for our own account or the account of others. In addition, the Group, in connection with our other business activities, may possess or acquire material information about the Underlying Assets or may issue or update research reports on the Underlying Assets. Such activities, information and/or research reports may involve or otherwise affect the Underlying Assets in a manner that may cause consequences adverse to you or otherwise create conflicts of interests in connection with the issue of Structured Products by us. Such actions and conflicts may include, without limitation, the purchase and sale of securities, financial advisory relationships and exercise of creditor rights. The Group:

(a) has no obligation to disclose such information about the Underlying Assets or such activities. The Group and our officers and directors may engage in any such activities without regard to the issue of Structured Products by us or the effect that such activities may directly or indirectly have on any Structured Product;

(b) may from time to time engage in transactions involving the Underlying Assets for our proprietary accounts and/or for accounts under our management and/or to hedge against the market risk associated with issuing the Structured Products. Such transactions may have a positive or negative effect on the price/level of the Underlying Assets and consequently upon the value of the relevant series of Structured Products;

(c) may from time to time act in other capacities with regard to the Structured Products, such as in an agency capacity and/or as the liquidity provider;

(d) may issue other derivative instruments in respect of the Underlying Assets and the introduction of such competing products into the market place may affect the value of the relevant series of Structured Products; and

(e) may also act as underwriter in connection with future offerings of shares, units or other securities or may act as financial adviser to the issuer, or sponsor, as the case may be, of any such share, unit or other security or in a commercial banking capacity for the issuer of any share, units or other security, the trustee (if applicable) or the manager of the ETF. Such activities could present certain conflicts of interest and may affect the value of the Structured Products.

Our business and results of operation have been and may, in the future, be adversely affected by financial markets, global credit and other economic and geopolitical challenges generally.

The Macquarie Group's businesses operate in or depend on the operation of global markets, including through exposures in securities, loans, derivatives and other activities and it is impacted by various factors it cannot control. In particular, uncertainty and volatility in global credit markets, liquidity constraints, increased funding costs, the level and volatility of interest rates, constrained access to funding, uncertainty concerning government shutdowns and debt ceilings, fluctuations or other significant changes in both equity and capital market activity, supply chain disruptions and labor shortages have adversely affected and may continue to adversely affect transaction flow in a range of industry sectors. These factors could also adversely affect the Macquarie Group's access to, and costs of funding and in turn may negatively impact our liquidity and competitive position. Recent stress in the global banking sector, including bank failures, has heightened the risk of volatility in global financial markets.

Additionally, global markets may be adversely affected by the current or anticipated impact of climate change, extreme weather events or natural disasters, the emergence or continuation of widespread health emergencies or pandemics, cyberattacks or campaigns, military conduct, including the Russia-Ukraine conflict, terrorism or other geopolitical events such as tensions between the U.S. and China, and concerns about a potential conflict involving Taiwan. The dynamic and constantly evolving sanctions environment, including the volume and nature of sanctions imposed during the Russia-Ukraine conflict, continues to drive heightened sanctions compliance risk and complexity in applying control frameworks across the market. Russia's invasion of Ukraine has caused, and may continue to cause, supply shocks in energy, food and other commodities markets, increased inflation, cybersecurity risks, increased volatility in commodity, currency and other financial markets, risk of recession in Europe and heightened geopolitical tensions. Moreover, actions by Russia, and any further measures taken by the U.S. or its allies, could continue to have negative impacts on regional and global energy and other commodities and financial markets and macroeconomic conditions, adversely impacting us and our customers, clients and employees.

Actions taken by central banks, including changes to official interest rate targets, balance sheet management and government-sponsored lending facilities are beyond the MBL Group's control and difficult to predict. Sudden changes in monetary policy, for example in response to high inflation, could lead to financial market volatility and are likely to affect market interest rates and the value of financial instruments and other assets and liabilities, and can impact our customers.

Sudden declines and significant volatility in the prices of assets may substantially curtail or eliminate the trading markets for certain assets, which may make it very difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces our ability to limit losses in such positions; and difficulty in valuing assets may negatively affect our capital, liquidity or leverage ratios, increase funding costs and generally require us to maintain additional capital.

Concerns about, or a default by, one or more institutions or by a sovereign could lead to market-wide liquidity problems, losses or defaults by other institutions, financial instruments losing their value and liquidity, and interruptions to capital markets that may further affect us. Negative perceptions about the soundness of a financial institution can result in counterparties seeking to limit their exposure and depositors withdrawing their deposits, which can happen more quickly than in the past due to advances in technology, further weakening the institution. Recent bank failures in the United States and Europe have heightened these concerns. The commercial soundness of many financial institutions may be closely interrelated as a result of credit, trading, clearing or other relationships among financial institutions. This risk is sometimes referred to as "systemic risk" and may adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms, hedge funds and exchanges that we interact with on a daily basis. If any of our counterpart financial institutions fail, our financial exposures to that institution may lose some or all of their value. Any of these events would have a serious adverse effect on our liquidity, profitability and value.

Changes and increased volatility in currency exchange rates may adversely impact our financial results and our financial and regulatory capital positions

While our consolidated financial statements are presented in Australian dollars, a significant portion of our operating income is derived, and operating expenses are incurred, from our offshore business activities, which are conducted in a broad range of currencies. Changes in the rate at which the Australian dollar is translated from other currencies can impact our financial statements and the economics of our business. Insofar as we are unable to hedge or have not completely hedged our exposure to currencies other than Australian dollar, our reported profit and foreign currency translation reserve would be affected. Such exchange risk that we are exposed to becomes more acute during periods of significant currency volatility.

In addition, because MBL Group's regulatory capital position is assessed in Australian dollars, our capital ratios may be adversely impacted by a depreciating Australian dollar, which increases the capital requirement for assets denominated in currencies other than Australian dollars.

Our business is subject to the risk of loss associated with price volatility in the equity markets and other markets in which we operate

We are exposed to changes in the value of financial instruments and other financial assets that are carried at fair market value, as well as changes to the level of our advisory and other fees, due to changes in interest rates, exchange rates, equity and commodity prices and credit spreads and other market risks. These changes may result from changes in economic conditions, monetary and fiscal policies, market liquidity, availability and cost of capital, international and regional political events, acts of war or terrorism, corporate, political or other scandals that reduce investor confidence in capital markets, natural disasters or pandemics or a combination of these or other factors.

We trade in foreign exchange, interest rate, commodity, bullion, energy, securities and other markets and are an active price maker in the derivatives market. Certain financial instruments that we hold and contracts to which we are a party are complex and these complex structured products often do not have readily available markets to access in times of liquidity stress. In addition, reductions in equity market prices or increases in interest rates may reduce the value of our clients' portfolios, which in turn may reduce the fees we earn for managing assets in certain parts of our business. Increases in interest rates or attractive prices for other investments could cause our clients to transfer their assets out of our funds or other products.

Interest rate benchmarks around the world (for example, the London Interbank Offered Rate or "**LIBOR**") have been subject to regulatory scrutiny and are subject to change.

Interest rate risk arises from a variety of sources including mismatches between the repricing periods of assets and liabilities. As a result of these mismatches, movements in interest rates can affect earnings or the value of the Macquarie Group.

Our business is subject to risks including trading losses, risks associated with market volatility and the risks associated with our physical commodities activities

Our commodities business primarily involves transacting with our clients to help them manage risks associated with their commodity exposures, and we may also enter into commodity transactions on our own behalf. These transactions often involve us taking on exposure to price movements in the underlying commodities. We employ a variety of techniques and processes to manage these risks, including hedging, but, we may not fully hedge our risk, and our risk management techniques may not be as effective as we intend for a variety of reasons, including unforeseen events occurring outside our risk modelling. Our counterparty risk may also be elevated at times of high volatility because our counterparties may be more likely to be under financial stress, increasing our exposure to potential losses as a result of those counterparties defaulting or failing to perform their obligations.

While most of our commodities markets activities involve financial exposures, from time to time we will also have physical positions, which expose us to the risks of owning and/or transporting commodities, some of which may be hazardous. Commodities involved in our intermediation activities and investments are also subject to the risk of unforeseen or catastrophic events, which are likely to be outside of our control. These risks may include accidents and failures with transportation and storage infrastructure, determinations made by exchanges, extreme weather events or other natural disasters, leaks, spills or release of hazardous substances, or hostile geopolitical events (including the Russia-Ukraine conflict). The occurrence of any of such events may prevent us from performing under our agreements with clients, may impair our operations or financial results and may result in litigation, regulatory action, negative publicity or other reputational harm. Also, while we seek to insure against potential risks, insurance may be uneconomic to obtain, the insurance that we have may not be adequate to cover all our losses or we may not be able to obtain insurance to cover some of these risks. There may also be substantial costs in complying with extensive and evolving laws and regulations relating to our commodities and risk management related activities and investments including energy and climate change laws and regulations worldwide.

Failure to maintain our credit ratings and those of our subsidiaries could adversely affect our cost of funds, liquidity, competitive position and access to capital markets

The credit ratings assigned to us and certain of our subsidiaries by rating agencies are based on their evaluation of a number of factors, including our ability to maintain a stable and diverse earnings stream, capital ratios, credit quality and risk management controls, funding stability and security, liquidity management and our key operating environments, including the availability of systemic support in Australia. In addition, a credit rating downgrade could be driven by the occurrence of one or more of the other risks identified in this section or by other events that are not related to the MBL Group.

If we fail to maintain our current credit ratings, this could (i) adversely affect our cost of funds, liquidity, competitive position, the willingness of counterparties to transact with us and our ability to access capital markets or (ii) trigger our obligations under certain bilateral provisions in some of our trading and collateralized financing contracts. Under these provisions, counterparties could be permitted to terminate contracts with us or require us to post collateral, which could cause us to sustain losses and impair our liquidity by requiring us to find other sources of financing or to make significant cash payments or securities movements.

Inflation has had, and could continue to have, a negative effect on our business, results of operations and financial condition

Inflationary pressures have affected economies, financial markets and market participants worldwide. Central bank responses to inflationary pressures have resulted in higher market interest rates and aggressive balance sheet policy, which has contributed and may continue to contribute to elevated financial and capital market volatility and significant changes to asset values. We expect elevated levels of inflation may result in higher labor costs and other operating costs, thus putting pressure on the MBL Group's expenses. Central bank actions in response to elevated inflation may lead to slow economic growth and increase the risk of recession, which could adversely affect the MBL Group's clients, businesses and results of operations.

We could suffer losses due to climate change

Our businesses could also suffer losses due to climate change. Climate change is systemic in nature and is a significant long-term driver of both financial and non-financial risks. Climate change related impacts include physical risks from changing climatic conditions which could result from increased frequency and/or severity of adverse weather events. Such disasters could disrupt our operations or the operations of customers or third parties on which we rely. Over the longer term, these events could impact the ability of our clients or customers to repay their obligations, reduce the value of collateral, negatively impact asset values and result in other effects. Additionally, climate change could result in transition risks such as changes to laws and regulations, technology development and disruptions and changes in consumer and market preferences towards low carbon goods and services. These factors could restrict the scope of our existing businesses, limit our ability to pursue certain business activities and offer certain products and services, amplify credit and market risks, negatively impact asset values, result in litigation, regulatory scrutiny and/or action, negative publicity or other reputational harm and/or otherwise adversely impact us, our business or our customers. Climate risks can also arise from the inconsistencies and conflicts in the manner in which climate policy and financial regulation are implemented in the regions where the MBL Group operates, including initiatives to apply and enforce policy and regulation with extraterritorial effect. Legislative or regulatory uncertainties and changes are also likely to result in higher regulatory, compliance, credit, reputation and other risks and costs. Our ability to meet our climate-related goals, targets and commitments, including our goal to achieve net zero operational emissions by FY2025 and our goal to align our financing activity with the global goal of net zero emissions by 2050, is subject to risks and uncertainties, many of which are outside of our control, such as technology advances, public policies and challenges related to capturing, verifying, analyzing and disclosing emissions and climate-related data. Failure to effectively manage these risks could adversely affect our business, prospects, reputation, financial performance or financial condition.

Many of our businesses are highly regulated and we could be adversely affected by temporary and permanent changes in law, regulations and regulatory policy

We operate various kinds of businesses across multiple jurisdictions or sectors which are regulated by more than one regulator. Additionally, some members of the Macquarie Group own or manage assets and businesses that are regulated. Our businesses include an Authorised Deposit-taking Institution (ADI) in Australia (regulated by the Australian Prudential Regulation Authority (APRA)), a credit institution in Ireland (regulated by the Central Bank of Ireland), bank branches in the United Kingdom, the Dubai International Finance Centre and Singapore and representative offices in the United States, South Africa, Brazil and Switzerland. The regulations vary from country to country but generally are designed to protect depositors and the banking system as a whole, not holders of Macquarie Bank's securities or creditors. In addition, as a diversified financial institution, many of our businesses are subject to financial services regulation other than prudential banking regulation, as well as laws, regulations and oversight specific to the industries applicable to our businesses and assets.

Regulatory agencies and governments frequently review and revise banking and financial services laws, security and competition laws, fiscal laws and other laws, regulations and policies, including fiscal policies. Changes to laws, regulations or policies, including changes in interpretation or implementation of laws, regulations or policies, could substantially affect us or our businesses, the products and services we offer or the value of our assets, or have unintended consequences or impacts across our business. These may include imposing more stringent liquidity requirements and capital adequacy, increasing tax burdens generally or on financial institutions or transactions, limiting the types of financial services and products that can be offered and/or increasing the ability of other providers to offer competing financial services and products, as well as changes to prudential regulatory requirements. Global economic conditions and increased scrutiny of the culture in the banking sector have led to increased supervision and regulation, as well as changes in regulation in the markets in which we operate and may lead to further significant changes of this kind. Health, safety, environmental and social laws and regulations can also change rapidly and significantly. The occurrence of any adverse health, safety, environmental or social event, or any changes, additions to, or more rigorous enforcement of, health, safety, environmental and social standards could have a significant impact on operations and/or result in material expenditures.

In some countries in which we do business or may in the future do business, in particular in emerging markets, the laws and regulations are uncertain and evolving, and it may be difficult for us to determine the requirements of local laws in every market. Our inability to remain in compliance with local laws in a particular market could have a significant and negative effect not only on our businesses in that market but also on our reputation generally. In addition, regulation is becoming increasingly extensive and complex, and in many instances requires us to make complex judgments, which increases the risk of non-compliance. Some areas of regulatory change involve multiple jurisdictions seeking to adopt a coordinated approach or certain jurisdictions seeking to expand the territorial reach of their regulation.

APRA may introduce new prudential regulations or modify existing regulations, including those that apply to Macquarie Bank as an ADI. Any such event could result in changes to the organisational structure of Macquarie Group and adversely affect the MBL Group.

We are subject to the risk of loss as a result of not complying with laws governing financial crime, including sanctions

We are subject in our operations worldwide to laws and regulations relating to corrupt and illegal payments, counter-terrorism financing, anti-bribery and corruption and adherence to anti-money laundering obligations, as well as laws, sanctions and economic trade restrictions relating to doing business with certain individuals, groups and countries. The geographical diversity of our operations, employees, clients and customers, as well as the vendors and other third parties that we deal with, increases the risk that we may be found in violation of financial crime related laws. Emerging financial crime risk typologies could also limit our ability to track the movement of funds thereby heightening the risk of our breaching financial crime related laws, sanctions or bribery and corruption laws. Our ability to comply with relevant laws is dependent on our detection and reporting capabilities, control processes and oversight accountability. Additionally, the current sanctions environment remains dynamic and constantly evolving. Increasingly complex sanctions and disclosure regimes, which often differ or are not aligned across countries, could adversely affect our business activities and investments, as well as expose us to compliance risk and reputational harm.

We may be adversely affected by increased governmental and regulatory scrutiny or negative publicity

The political and public sentiment regarding financial institutions have resulted in a significant amount of adverse press coverage, as well as adverse statements or charges by regulators or other government officials, and in some cases, to increased regulatory scrutiny, enforcement actions and litigation. Investigations, inquiries, penalties and fines sought by regulatory authorities have increased substantially over the last several years, with regulators exercising their enhanced enforcement powers in commencing enforcement actions or with advancing or supporting legislation targeted at the financial services industry. If we are subject to adverse regulatory findings, the financial penalties could have a material adverse effect on our results of operations. Adverse publicity, governmental scrutiny and legal and enforcement proceedings can also have a negative impact on our reputation with clients and on the morale and performance of our employees.

Litigation and regulatory actions may adversely impact our results of operations

We may, from time to time, be subject to material litigation and regulatory actions, for example, as a result of inappropriate documentation of contractual relationships, class actions or regulatory breaches, which, if they crystallize, may adversely impact upon our results of operations and financial condition in future periods or our reputation. We regularly obtain legal advice and make provisions, as deemed necessary. There is a risk that any losses may be larger than anticipated or provided for or that additional litigation, regulatory actions or other contingent liabilities may arise. Furthermore, even where monetary damages may be relatively small, an adverse finding in a regulatory or litigation matter could harm our reputation or brand, thereby adversely affecting our business.

We may not manage risks associated with the replacement of interest rate benchmarks effectively

LIBOR and other interest rate benchmarks (collectively, the "**IBORs**") have been the subject of ongoing national and international regulatory scrutiny and reform. The transition away from and discontinuance of LIBOR or any other benchmark rate and the adoption of alternative reference rates ("**ARR**") by the market introduce a number of risks for us, our clients, and the financial services industry more widely. These include, but are not limited to:

(a) Conduct risks – where, by undertaking actions to transition away from using the IBORs, we face conduct risks which may lead to client complaints, regulatory sanctions or reputational impact.

(b) Legal and execution risks – relating to documentation changes required for new ARR products and for the transition of legacy contracts to ARRs.

(c) Financial risks and pricing risks – any changes in the pricing mechanisms of financial instruments linked to IBOR or ARRs which could impact the valuations of these instruments.

(d) Operational risks – due to the potential need for us, our clients and the market to adapt information technology systems, operational processes and controls to accommodate one or more ARRs for a large volume of trades.

Any of these factors may have a material adverse effect on MBL Group's business, results of operations, financial condition and prospects.

Failure of third parties to honor their commitments in connection with our trading, lending and other activities may adversely impact our business

We are exposed to potential losses as a result of an individual, counterparty or issuer being unable or unwilling to honor its contractual obligations. We are also exposed to potential concentration risk arising from individual exposures or other concentrations including to industries or countries. We assume counterparty risk in connection with our lending, trading, derivatives and other businesses where we rely on the ability of third parties to satisfy their financial obligations to us in full and on a timely basis. Our recovery of the value of the resulting credit exposure may be adversely affected by a number of factors, including declines in the financial condition of the counterparty, the value of collateral we hold and the market value of counterparty obligations we hold. A period of low or negative economic growth and/or a rise in unemployment could also adversely impact the ability of our consumer and/or commercial borrowers or counterparties to meet their financial obligations and negatively impact our credit portfolio. Consumers have been and may continue to be negatively impacted by inflation, resulting in drawdowns of savings or increases in household debt. Higher interest rates, which have increased debt servicing costs for some businesses and households, may adversely impact credit quality, particularly in a period of low or negative economic growth. If the macroeconomic environment worsens, our credit portfolio and allowance for credit losses could be adversely impacted.

We may experience impairments in our loans, investments and other assets

Sudden declines and significant volatility in the prices of assets may substantially curtail or eliminate the trading markets for certain assets, which may make it very difficult to sell, hedge or value such assets. The inability to sell or effectively hedge assets reduces our ability to limit losses in such positions and the difficulty in valuing assets may negatively affect our capital, liquidity or leverage ratios, increase our funding costs and generally require us to maintain additional capital.

Our ability to retain and attract qualified employees is *critical to the success of our business and the failure to do so may materially adversely affect our performance*

Our employees are our most important resource, and our performance largely depends on the talents and efforts of highly skilled individuals. Our continued ability to compete effectively in our businesses and to expand into new business areas and geographic regions depends on our ability to retain and motivate our existing employees and attract new employees. Competition from within the financial services industry and from businesses outside the financial services industry for qualified employees has historically been intense. Recent employment conditions associated with the COVID-19 pandemic have made the competition to hire and retain qualified employees significantly more challenging and costly. Attrition rates have risen due to factors such as low unemployment, a strong job market with a large number of open positions and changes in worker expectations, concerns and preferences, including an increased demand for remote work options and other flexibility.

In order to attract and retain qualified employees, we must compensate such employees at or above market levels. As a regulated entity, we may be subject to limitations on remuneration practices. These limitations may require us to further alter our remuneration practices in ways that could adversely affect our ability to attract and retain qualified and talented employees.

Current and future laws (including laws relating to immigration and outsourcing) may restrict our ability to move responsibilities or personnel from one jurisdiction to another. This may impact our ability to take advantage of business and growth opportunities or potential efficiencies.

We may incur financial loss, adverse regulatory consequences or reputational damage due to inadequate or failure in internal or external operational systems and infrastructures, people and processes

Our businesses depend on our ability to process and monitor, on a daily basis, a very large number of transactions, many of which are highly complex, across numerous and diverse markets in many currencies. While we employ a range of risk monitoring and risk mitigation techniques, those techniques and the judgments that accompany their application cannot anticipate every economic and financial outcome or the specifics and timing of such outcomes. As such, we may, in the course of our activities, incur losses. There can be no assurance that the risk management processes and strategies that we have developed will adequately anticipate or be effective in addressing market stress or unforeseen circumstances. We face the risk of operational failure, termination or capacity constraints of any of the counterparties, clearing agents, exchanges, clearing houses or other financial intermediaries we use to facilitate our securities or derivatives transactions, and as our interconnectivity with our clients and counterparties grows, the risk to us of failures in our clients' and counterparties' systems also grows. Our financial, accounting, data processing or technology assets may fail to operate properly or be disrupted as a result of events that are wholly or partially beyond our control.

Our businesses manage a large volume of sensitive data and rely on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in our data management systems and technology, and in those managed, processed and stored by third parties on behalf of us. Inadequate data management and data quality, which include the capture, processing, distribution, retention and disposal of data, could lead to poor decision making in the provision of credit as well as affecting our data management regulatory obligations, all of which may cause us to incur losses or lead to regulatory actions.

We are subject to laws, rules and regulations in a number of jurisdictions regarding compliance with our privacy policies and the disclosure, collection, use, sharing and safeguarding of personally identifiable information, the violation of which could result in litigation, regulatory fines and enforcement actions. Furthermore, a breach, failure or other disruption of our data management systems and technology, or those of our third party service providers, could lead to the unauthorized or unintended release, misuse, loss or destruction of personal or confidential data about our customers, employees or other third parties in our possession, which could materially damage our reputation and expose us to liability for violations of privacy and data protection laws.

We are exposed to the risk of loss resulting from the failure of our internal or external processes and systems, such as from the disruption or failure of our IT systems, or from external suppliers and service providers including public and private cloud-based technology platforms.

We are also exposed to the risk of loss resulting from the actions or inactions of our employees, contractors and external service providers. It is not always possible to deter or prevent employee misconduct. The precautions we take to prevent and detect this activity may not be effective in all cases, which could result in financial losses, regulatory intervention and reputational damage.

A cyber-attack, information or security breach, or a technology disruption event of ours or of a third party supplier could adversely affect our ability to conduct our business, manage our exposure to risk or expand our businesses. This may result in the disclosure or misuse of confidential or proprietary information and an increase in our costs to maintain and update our operational and security controls and infrastructure

Our businesses depend on the security and efficacy of our data management systems and technology, as well as those of third parties with whom we interact or on whom we rely. To access our network, products and services, our customers and other third parties may use personal mobile devices or computing devices that are outside of our network environment and are subject to their own cybersecurity risks. While we seek to operate in a control environment that limits the likelihood of a cyber and information security incident, and to ensure that the impact of a cyber and information security incident can be minimized by information security capability and incident response, there can be no assurances that our security controls will provide absolute security against a dynamic external threat environment.

Cyber and information security risks for financial institutions have increased in recent years, in part because of the proliferation of new technologies, the use of internet and telecommunications technology, the increase in remote working arrangements, and the increased sophistication and activities of attackers (including hackers, organized criminals, terrorist organizations, hostile state-sponsored activity, disgruntled individuals, activists and other external parties). Global events and geopolitical instability may increase security threats targeted at financial institutions. Targeted social engineering attacks are becoming more sophisticated and are extremely difficult to prevent, and requires the exercise of sound judgment and vigilance by our employees when we are targeted by such attacks. The techniques used by hackers change frequently and may not be recognized until launched or until after a breach has occurred. Additionally, the existence of cyber-attacks or security breaches at our supplier may also not be disclosed to us in a timely manner. Despite efforts to protect the integrity of our systems through the implementation of controls, processes, policies and other protective measures, there is no guarantee that the measures we continue to take will provide absolute security or recoverability given that the techniques used in cyber-attacks are complex, executed rapidly, frequently evolving, and as a result are difficult to prevent, detect, and respond to.

Due to increasing consolidation, interdependence and complexity of financial entities and technology systems, a technology failure, cyber-attack or other information or security breach that significantly degrades, deletes, or compromises the systems or data of one or more financial entities could have a material impact on counterparties or other market participants, including us. This consolidation, interconnectivity and complexity increases the risk of operational failure, on both individual and industry-wide bases, as disparate systems need to be integrated. Any third-party technology failure, cyber-attack or other information or security breach, termination or constraint could, among other things, adversely affect our ability to effect transactions, service our clients, manage our exposure to risk or expand our businesses.

We anticipate cyber-attacks will continue to occur because perpetrators are well resourced, deploying highly sophisticated techniques that can evolve rapidly. This challenges our ability to implement effective controls measures to prevent or minimize damage that may be caused by all information security threats.

Cyber-attacks or other information or security breaches, whether directed at us or third parties, may result in a material loss or have adverse consequences for MBL Group, including operational disruption, financial losses, reputational damage, theft of intellectual property and customer data, violations of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in our security measures and additional compliance costs, all of which could have a material adverse impact on the MBL Group.

We could suffer losses due to hostile, catastrophic or unforeseen events, including due to environmental and social factors

Our businesses are subject to the risk of unforeseen, hostile or catastrophic events, many of which are outside of our control, including natural disasters, extreme weather events, occurrence of diseases, leaks, spills, explosions, release of toxic substances, fires, accidents on land or at sea, terrorist attacks, military conflict including the current conflict between Russia and Ukraine, or other hostile or catastrophic events.

Any significant environmental change or external event (including increased frequency and severity of storms, floods and other catastrophic events such as earthquakes, persistent changes in precipitation levels, rising average global temperatures, rising sea levels, pandemics (such as COVID-19), other widespread health emergencies, civil unrest, geopolitical or terrorism events) has the potential to disrupt business activities, impact our operations or reputation, increase credit risk and other credit exposures, damage property and otherwise affect the value of assets held in the affected locations and our ability to recover amounts owing to us.

The occurrence of any such events may prevent us from performing under our agreements with clients, may impair our operations or financial results, and may result in litigation, regulatory action, negative publicity or other reputational harm. We may also not be able to obtain insurance to cover some of these risks and the insurance that we have may be inadequate to cover our losses. Any such long-term, adverse environmental or social consequences could prompt us to exit certain businesses altogether. In addition, such an event or environmental change (as the case may be) could have an adverse impact on economic activity, consumer and investor confidence, or the levels of volatility in financial markets.

The COVID-19 pandemic caused, and may continue to cause, severe impacts on global, regional and national economies and disruption to international trade and business activity.

The nature and extent of the continuing effects of COVID-19 on the economy and our personnel and operations are uncertain and cannot be predicted and will depend on a number of factors, including the emergence and spread of new variants of COVID-19, the availability, adoption and efficacy of future treatments and vaccines and future actions taken by government authorities, central banks and other third parties in response to the COVID-19 pandemic. All these factors may lead to further reduced client activity and demand for our products and services, disruption or failure of our performance of, or our ability to perform, key business functions, the possibility that significant portions of our workforce are unable to work effectively, including because of illness, quarantines, shelter-in-place arrangements, government restrictions or other restrictions in connection with the COVID-19 pandemic, higher credit and valuation losses in our loan and investment portfolios, impairments of financial assets, trading losses and other negative impacts on our financial position, including possible constraints on capital and liquidity, as well as higher costs of capital, and possible changes or downgrades to our credit ratings. This may adversely impact our results of operations and financial condition.

We also face increasing public scrutiny, laws and regulations related to environmental and social factors. We risk damage to our brand and reputation if we fail to act responsibly in a number of areas, such as diversity and inclusion, environmental stewardship, respecting the rights of Indigenous Peoples, support for local communities, corporate governance and transparency and considering environmental and social factors in our investment and procurement processes. Failure to effectively manage these risks may result in breaches of our statutory obligations and could adversely affect our business, prospects, reputation, financial performance or financial condition.

Failure of our insurance carriers or our failure to maintain adequate insurance cover could adversely impact our results of operations

We maintain insurance that we consider to be prudent for the scope and scale of our activities. If our insurance carriers fail to perform their obligations to us and/or our third party cover is insufficient for a particular matter or group of related matters, our net loss exposure could adversely impact our results of operations.

Our business may be adversely affected by our failure to adequately manage the risks associated with strategic opportunities and new businesses, including acquisitions, and the exiting or restructuring of existing businesses

We are continually evaluating strategic opportunities and undertaking acquisitions of businesses, some of which may be material to our operations. Our completed and prospective acquisitions and growth initiatives may cause us to become subject to unknown liabilities of the acquired or new business and additional or different regulations.

Future growth, including through acquisitions, mergers and other corporate transactions, may also place significant demands on our legal, accounting, IT, risk management and operational infrastructure and result in increased expenses. A number of our recent and planned business initiatives and further expansions of existing businesses may also expose us to new and enhanced risks, including reputational concerns arising from dealing with a range of new counterparties and investors, actual or perceived conflicts of interest, regulatory scrutiny of these activities, potential political pressure, increased credit-related and operational risks, including risks arising from IT systems and reputational concerns with the manner in which these businesses are being operated or conducted.

We may be exposed to a number of risks in acquiring new businesses and in outsourcing, exiting or restructuring existing businesses. Where our acquisitions are in foreign jurisdictions, or are in emerging or growth economies in particular, we may be exposed to heightened levels of regulatory scrutiny and political, social or economic disruption and sovereign risk in emerging and growth markets.

Our business depends on our brand and reputation

We believe our reputation in the financial services markets and the recognition of the Macquarie brand by our customers are important contributors to our business. Many companies in Macquarie Group and many of the funds managed by entities owned, in whole or in part, by MBL and Macquarie Group Limited use the Macquarie name. We do not control those entities that are not in MBL Group, but their actions may reflect directly on our reputation.

Our business may be adversely affected by negative publicity or poor financial performance in relation to any of the entities using the Macquarie name, including any Macquarie-managed fund or funds that Macquarie has promoted or is associated with. If funds that use the Macquarie name or are otherwise associated with Macquarie-managed assets are perceived to be managed inappropriately, those managing entities could be subject to criticism and negative publicity, harming our reputation and the reputation of other entities that use the Macquarie name.

Competitive pressure, both in the financial services industry as well as in the other industries in which we operate, could adversely impact our business

We face significant competition from local and international competitors, which compete vigorously in the markets and sectors across which we operate. In addition, digital technologies and business models are changing consumer behavior and the competitive environment. The use of digital channels by customers to conduct their banking continues to rise and emerging competitors are increasingly utilizing new technologies and seeking to disrupt existing business models, including in relation to digital payment services and open data banking, that challenge, and could potentially disrupt, traditional financial services. We face competition from established providers of financial services as well as from businesses developed by non-financial services companies. We believe that we will continue to experience pricing pressures in the future as some of our competitors seek to obtain or increase market share.

The widespread adoption and rapid evolution of new technologies, including analytic capabilities, self-service digital trading platforms and automated trading markets, internet services and digital assets, such as central bank digital currencies, cryptocurrencies (including stablecoins), tokens and other cryptoassets, clearing and settlement processes could have a substantial impact on the financial services industry. As such new technologies evolve and mature, our businesses and results of operations could therefore be adversely impacted

Any consolidation in the global financial services industry may create stronger competitors with broader ranges of product and service offerings, increased access to capital, and greater efficiency and pricing power which may enhance the competitive position of Macquarie’s competitors. In addition to mergers and acquisitions pursued for commercial reasons, consolidation may also occur as a result of bank regulators encouraging or directing stronger institutions to acquire weaker institutions to preserve stability.

The effect of competitive market conditions, especially in our main markets, products and services, may lead to an erosion in our market share or margins.

Conflicts of interest could limit our current and future business opportunities

As we expand our businesses and our client base, we increasingly have to address potential or perceived conflicts of interest, including situations where our services to a particular client conflict with, or are perceived to conflict with, our own proprietary investments or other interests or with the interests of another client, as well as situations where one or more of our businesses have access to material non public information that may not be shared with other businesses within the Macquarie Group. While we believe we have adequate procedures and controls in place to address conflicts of interest, including those designed to prevent the improper sharing of information among our businesses, appropriately dealing with conflicts of interest is complex and difficult, and our reputation could be damaged and the willingness of clients or counterparties to enter into transactions may be adversely affected if we fail, or appear to fail, to deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to claims by and liabilities to clients, litigation or enforcement actions.

Our business operations expose us to potential tax liabilities that could have an adverse impact on our results of operations and our reputation

We are exposed to risks arising from the manner in which the Australian and international tax regimes may be applied, enforced and amended, both in terms of our own tax compliance and the tax aspects of transactions on which we work with clients and other third parties. Our international, multi-jurisdictional platform increases our tax risks. Any actual or alleged failure to comply with or any change in the interpretation, application or enforcement of applicable tax laws and regulations could adversely affect our reputation and affected business areas, significantly increase our own tax liability and expose us to legal, regulatory and other actions.

General risks relating to Structured Products

You may lose all your investment in the Structured Products

Structured Products involve a high degree of risk, and are subject to a number of risks which may include interest rate, foreign exchange, time value, market, and/or political risks. Structured Products may expire worthless.

Options, warrants and asset linked instruments are priced primarily on the basis of the price/level of the Underlying Asset, the volatility of the Underlying Asset's price/level and the time remaining to expiry of the Structured Product.

The prices of Structured Products generally may fall in value as rapidly as they may rise and you should be prepared to sustain a significant or total loss of the purchase price of the Structured Products. Assuming all other factors are held constant, the more the price or level of a Structured Product moves in a direction against you and the shorter its remaining term to expiration, the greater the risk that you will lose all or a significant part of your investment.

The Structured Products are only exercisable on their respective Expiry Dates and may not be exercised by you prior to the relevant Expiry Date. Accordingly, if on such Expiry Date the Cash Settlement Amount is zero or negative, you will lose the entire amount of your investment and transaction costs.

The risk of losing all or any part of the purchase price of a Structured Product means that, in order to recover and realise a return on your investment, you must generally anticipate correctly the direction, timing and magnitude of any change in the price/level of the Underlying Asset as may be specified in the relevant launch announcement and supplemental listing document.

Changes in the price/level of an Underlying Asset can be unpredictable, sudden and large and such changes may result in the price/level of the Underlying Asset moving in a direction which will negatively impact upon the return on your investment. You therefore risk losing your entire investment if the price/level of the relevant Underlying Asset does not move in the anticipated direction.

The value of the Structured Products may be disproportionate or opposite to movement in the price/level of the Underlying Assets

An investment in Structured Products is not the same as owning the Underlying Assets or having a direct investment in the Underlying Asset. The market values of Structured Products are linked to the relevant Underlying Assets and will be influenced (positively or negatively) by it or them but any change may not be comparable and may be disproportionate. It is possible that while the price/level of the Underlying Assets is increasing (for a call warrant or a bull CBBC), the value of the Structured Product is falling.

If you intend to purchase any series of Structured Products to hedge against the market risk associated with investing in the Underlying Asset specified in the relevant launch announcement and supplemental listing document, you should recognise the complexities of utilizing Structured Products in this manner. For example, the value of the Structured Products may not exactly correlate with the price/level of the Underlying Asset. Due to fluctuations in supply and demand for Structured Products, there is no assurance that their value will correlate with movements of the Underlying Asset. The Structured Products may not be a perfect hedge to the Underlying Asset or portfolio of which the Underlying Asset forms a part.

It may not be possible to liquidate the Structured Products at a level which directly reflects the price/level of the Underlying Asset or portfolio of which the Underlying Asset forms a part. Therefore, it is possible that you could suffer substantial losses in the Structured Products in addition to any losses suffered with respect to investments in or exposures to the Underlying Asset.

Possible illiquidity of secondary market

It is not possible to predict:

(a) if and to what extent a secondary market may develop in any series of Structured Products;

(b) at what price such series of Structured Products will trade in the secondary market; and

(c) whether such market will be liquid or illiquid.

The fact that the Structured Products are listed does not necessarily lead to greater liquidity than if they were not listed.

If any series of Structured Products are not listed or traded on any exchange, pricing information for such series of Structured Products may be difficult to obtain and the liquidity of that series of Structured Products may be adversely affected.

The liquidity of any series of Structured Products may also be affected by restrictions on offers and sales of the Structured Products in some jurisdictions. Transactions in off-exchange Structured Products may be subject to greater risks than dealing in exchange-traded Structured Products. To the extent that any Structured Products of a series is closed out, the number of Structured Products outstanding in that series will decrease, which may result in a lessening of the liquidity of Structured Products. A lessening of the liquidity of the affected series of Structured Products may cause, in turn, an increase in the volatility associated with the price of such Structured Products.

While we have, or will appoint, a liquidity provider for the purposes of making a market for each series of Structured Products, there may be circumstances outside our control or the appointed liquidity provider's control where the appointed liquidity provider's ability to make a market in some or all series of Structured Products is limited, restricted, and/or without limitation, frustrated. In such circumstances we will use our best endeavours to appoint an alternative liquidity provider.

Interest rates

Investments in the Structured Products may involve interest rate risk. A variety of factors influence interest rates such as macroeconomic, governmental, speculative and market sentiment factors. Fluctuations in interest rates (whether short term or long term, and whether of the currency in which the Structured Products are settled or of the currency in which the Underlying Assets are denominated) may affect the value of the Structured Products.

Time decay

The settlement amount of certain series of Structured Products at any time prior to expiration may be less than the trading price of such Structured Products at that time. The difference between the trading price and the settlement amount will reflect, among other things, a "time value" of the Structured Products. The "time value" of the Structured Products will depend upon, among others, the length of the period remaining to expiration and expectations concerning the range of possible future price/level of the Underlying Assets. The value of a Structured Product is likely to decrease over time. Therefore, the Structured Products should not be viewed as products for long term investments.

Exchange rate risk

There may be an exchange rate risk in the case of Structured Products where the Cash Settlement Amount will be converted from a foreign currency into the Settlement Currency. Exchange rates between currencies are determined by forces of supply and demand in the foreign exchange markets. These forces are, in turn, affected by factors such as international balances of payments and other economic and financial conditions, government intervention in currency markets and currency trading speculation.

Fluctuations in foreign exchange rates, foreign political and economic developments and the imposition of exchange controls or other foreign governmental laws or restrictions applicable to such investments may affect the foreign currency market price and the exchange rate-adjusted equivalent price of the Structured Products. Fluctuations in the exchange rate of any one currency may be offset by fluctuations in the exchange rate of other relevant currencies. There can be no assurance that rates of exchange between any relevant currencies at the date of issue of any Structured Products will be representative of the relevant rates of exchange used in computing the value of the relevant Structured Products at any time thereafter.

Where Structured Products are described as being "quantoed", the value of the Underlying Assets will be converted from one currency (the "**Original Currency**") into a new currency (the "**New Currency**") on the date and in the manner specified in, or implied by, the General Conditions and/or the relevant Product Conditions using a fixed exchange rate. The cost to us of maintaining such a fixing between the Original Currency and the New Currency will have an implication on the value of the Structured Products, which will vary during the term of the Structured Products. No assurance can be given as to whether or not, taking into account relative exchange rate and interest rate fluctuations between the Original Currency and the New Currency, a quanto feature in a Structured Product would at any time enhance the return on the Structured Product over a level of a similar Structured Product issued without such a quanto feature.

Taxes

You may be required to pay stamp duty or other taxes or other documentary charges. If you are in doubt as to your tax position, you should consult your own independent tax advisers. In addition, you should be aware that tax regulations and their application by the relevant taxation authorities change from time to time. Accordingly, it is not possible to predict the precise tax treatment which will apply at any given time. See "Do you need to pay any tax?" in the section headed "Important Information" for further information.

Modification to the Conditions

Under the Conditions, we may without your consent, effect any modification of the terms and conditions of the Structured Products or Instrument which in our opinion, is:

(a) not materially prejudicial to the interest of the Structured Products holders generally (without considering the circumstances of any individual Structured Products holder or the tax or other consequences of such modification in any particular jurisdiction);

(b) of a formal, minor or technical nature;

(c) made to correct a manifest error; or

(d) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Possible early termination for illegality or impracticability

If we determine in good faith and in a commercially reasonable manner that, for reasons beyond our control, it has become or it will become illegal or impracticable: (i) for us to perform our obligations under the Structured Products in whole or in part as a result of: (a) the adoption of, or any change in, any relevant law or regulation (including any tax law); or (b) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law), (each of (a) and (b), a "**Change in Law Event**"); or (ii) for us or any of our affiliates to maintain our hedging arrangements with respect to the Structured Products due to a Change in Law Event. We may at our absolute discretion terminate the Structured Products. In such event, we will, if and to the extent permitted by applicable law, pay an amount calculated by us to be the fair market value of the Structured Products prior to such termination notwithstanding the illegality or impracticability less our cost of unwinding any related hedging arrangements.

Our hedging activities may adversely affect the price/level of the Underlying Asset

We and/or any of our affiliates may carry out activities that minimise our risks related to the Structured Products, including effecting transactions for our own account or for the account of our customers and hold long or short positions in the Underlying Asset whether for risk reduction purposes or otherwise. In addition, in connection with the offering of any Structured Products, we and/or any of our affiliates may enter into one or more hedging transactions with respect to the Underlying Asset. In connection with such hedging or market-making activities or with respect to proprietary or other trading activities by us and/or any of our affiliates, we and/or any of our affiliates may enter into transactions in the Underlying Asset which may affect the market price, liquidity or price/level of the Underlying Asset and/or the value of Structured Products and which could be deemed to be adverse to your interests. We and/or our affiliates are likely to modify our hedging positions throughout the life of the Structured Products whether by effecting transactions in the Underlying Asset or in derivatives linked to the Underlying Asset. Further, it is possible that the advisory services which we and/or our affiliates provide in the ordinary course of our business could lead to an adverse impact on the value of the Underlying Asset.

Foreign Account Tax Compliance withholding may affect payments on the Structured Products

Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986 ("**FATCA**") impose a new reporting regime and, potentially, a 30% withholding tax with respect to (i) certain payments from sources within the United States, (ii) "foreign passthru payments" made to certain non-U.S. financial institutions that do not comply with this new reporting regime, and (iii) payments to certain investors that do not provide identification information with respect to interests issued by a participating non-U.S. financial institution.

Withholding with respect to "foreign passthru payments" will not be effective before the date that is two years after the publication of final regulations defining the term "foreign pass-thru payment".

While the Structured Products are in dematerialized form and held within the clearing systems, in all but the most remote circumstances, it is not expected that FATCA will affect the amount of any payment received by the clearing systems. However, FATCA may affect payments made to custodians or intermediaries in the subsequent payment chain leading to the ultimate investor if any such custodian or intermediary generally is unable to receive payments free of FATCA withholding. It also may affect payment to any ultimate investor that is a financial institution that is not entitled to receive payments free of withholding under FATCA, or an ultimate investor that fails to provide its broker (or other custodian or intermediary from which it receives payment) with any information, forms, other documentation or consents that may be necessary for the payments to be made free of FATCA withholding. Investors should choose the custodians or intermediaries with care (to ensure each is compliant with FATCA or other laws or agreements related to FATCA) and provide each custodian or intermediary with any information, forms, other documentation or consents that may be necessary for such custodian or intermediary to make a payment free of FATCA withholding. An Issuer's obligations under the Structured Products are discharged once it has paid the clearing systems and an Issuer has therefore no responsibility for any amount thereafter transmitted through the clearing systems and custodians or intermediaries.

FATCA IS PARTICULARLY COMPLEX. EACH INVESTOR SHOULD CONSULT ITS OWN TAX ADVISER TO OBTAIN A MORE DETAILED EXPLANATION OF FATCA AND TO DETERMINE

HOW THIS LEGISLATION MIGHT AFFECT EACH INVESTOR IN ITS PARTICULAR CIRCUMSTANCES.

Risks relating to the Underlying Asset

You have no right to the Underlying Asset

Unless specifically indicated in the Conditions, you will not be entitled to:

(a) voting rights or rights to receive dividends or other distributions or any other rights that a holder of the shares or units would normally be entitled to; or

(b) voting rights or rights to receive dividends or other distributions or any other rights with respect to any company constituting any underlying index.

Valuation risk

An investment in Structured Products may involve valuation risk as regards the Underlying Assets to which the particular series of Structured Products relate. The price/level of the Underlying Asset may vary over time and may increase or decrease by reference to a variety of factors which may include corporate actions, macroeconomic factors, speculation and (where the Underlying Asset is an index) changes in the formula for or the method of calculating the index.

You must be experienced with dealing in these types of Structured Products and must understand the risks associated with dealing in such products. You should reach an investment decision only after careful consideration, with your advisers, of the suitability of any Structured Product in light of your particular financial circumstances, the information regarding the relevant Structured Product and the particular Underlying Asset to which the value of the relevant Structured Product relates.

Adjustment related risk

In the case of Structured Products relating to a single equity or an ETF ("**Security**"), certain corporate events relating to the Security require or, as the case may be, permit us to make certain adjustments or amendments to the General Conditions and/or the relevant Product Conditions. You have limited anti-dilution protection under the General Conditions and the relevant Product Conditions of the Structured Products. We may in a commercially reasonable manner adjust, among other things, the Entitlement, the Exercise Price (if applicable), the Call Price (if applicable), the Strike Price (if applicable) or any other terms (including without limitation the Closing Price of the Security) of any series of Structured Product for events such as rights issue, bonus issue, subdivision, consolidation, cash distribution or restructuring event. However, we are not required to make an adjustment for every event that may affect a Security, in which case the market price of the Structured Products and the return upon the expiry of the Structured Products may be affected.

In addition, if the Security ceases to be listed on the relevant exchange during the term of the Structured Products, we may make adjustments and/or amendments to the rights attaching to the Structured Products pursuant to the Conditions of the Structured Products. Such adjustments and/or amendments will be conclusive and binding on you.

In the case of Structured Products which relate to an index, the level of the index may be published by the index compiler at a time when one or more shares comprising in the index are not trading. If this occurs on the Valuation Date but such occurrence does not constitute a Market Disruption Event under the Conditions then the value of such share(s) may not be included in the level of the index. In addition, certain events relating to the index (including a material change in the formula or the method of calculating the index or a failure to publish the index) permit us to determine the level of the index on the basis of the formula or method last in effect prior to such change in formula or method.

Suspension of trading

If the Underlying Asset of a series of Structured Products is suspended from trading or dealing for whatever reason on the market on which it is listed or dealt in (including the Stock Exchange), trading in the relevant series of Structured Products will be suspended for a similar period. In addition, if an Underlying Asset is an index and the calculation and/or publication of the index level by the index compiler is suspended for whatever reasons, trading in the relevant series of Structured Products may be suspended for a similar period. The value of the Structured Products will decrease over time as the length of the period remaining to expiration becomes shorter. In such circumstances, you should note that in the case of a prolonged suspension period, the market price of the Structured Products may be subject to a significant impact of time decay of such prolonged suspension period and may fluctuate significantly upon resumption of trading after the suspension period of the Structured Products. This may adversely affect your investment in the Structured Products.

Delay in settlement

Unless otherwise specified in the General Conditions and/or the relevant Product Conditions, in the case of any expiry of Structured Products, there may be a time lag between the date on which the Structured Products expire, and the time the applicable settlement amount relating to such event is determined. Any such delay between the time of expiry and the determination of the settlement amount will be specified in the General Conditions and/or the relevant Product Conditions.

However, such delay could be significantly longer, particularly in the case of a delay in the expiry of such Structured Products arising from our determination that a Market Disruption Event, Settlement Disruption Event or delisting of a company or fund has occurred at any relevant time or that adjustments are required in accordance with the General Conditions and/or the relevant Product Conditions.

That applicable settlement amount may change significantly during any such period, and such movement or movements could decrease or modify the settlement amount of the Structured Products.

You should note that in the event of there being a Settlement Disruption Event or a Market Disruption Event, payment of the Cash Settlement Amount may be delayed as more fully described in the General Conditions and the relevant Product Conditions.

Risks specific to Underlying Asset adopting the multiple counters model

Where the Underlying Asset adopts the multiple counters model for trading its units or shares on the Stock Exchange in Hong Kong dollars ("**HKD**") and one or more foreign currencies (such as Renminbi and/or United States Dollars) ("**Foreign Currency**") separately, the relatively recent introduction and untested nature of the Stock Exchange's multiple counters model may bring the following additional risks:

(a) the Structured Products may be linked to the HKD-traded or the Foreign Currency-traded units or shares. If the Underlying Asset is the units or shares traded in one currency counter, movements in the trading prices of the units or shares traded in another currency counter should not directly affect the price of the Structured Products;

(b) if there is a suspension of inter-counter transfer of such units or shares between different currency counters for any reason, such units or shares will only be able to be traded in the relevant currency counter on the Stock Exchange, which may affect the demand and supply of such units or shares and have an adverse effect on the price of the Structured Products; and

(c) the trading price on the Stock Exchange of the units or shares traded in one currency counter may deviate significantly from the trading price on the Stock Exchange of units or shares traded in another currency counter due to different factors, such as market liquidity, foreign exchange conversion risk, supply and demand in each counter and the exchange rate fluctuation. Changes in the trading price of the Underlying Asset in the relevant currency counter may adversely affect the price of the Structured Products.

Risks relating to Structured Products over funds

General risks

In the case of Structured Products which relate to the units or shares of a fund:

(a) neither we nor any of our affiliates have the ability to control or predict the actions of the trustee (if applicable) or the manager of the relevant fund. Neither the trustee (if applicable) nor the manager of the relevant fund (i) is involved in the offer of any Structured Product in any way, or (ii) has any obligation to consider the interest of the holders of any Structured Product in taking any corporate actions that might affect the value of any Structured Product; and

(b) we have no role in the relevant fund. The manager of the relevant fund is responsible for making strategic, investment and other trading decisions with respect to the management of the relevant fund consistent with its investment objectives and in compliance with the investment restrictions as set out in the constitutive documents of the relevant fund. The manner in which the relevant fund is managed and the timing of actions may have a significant impact on the performance of the relevant fund. Hence, the market price of the relevant units or shares is also subject to these risks.

Exchange traded funds

Where the Underlying Asset of Structured Products comprises the units or shares of an ETF, you should note that:

(a) an ETF is exposed to the economic, political, currency, legal and other risks of a specific sector or market related to the underlying asset pool or index or market that the ETF is designed to track;

(b) there may be disparity between the performance of the ETF and the performance of the underlying asset pool or index or market that the ETF is designed to track as a result of, for example, failure of the tracking strategy, currency differences, fees and expenses; and

(c) where the underlying asset pool or index or market that the ETF tracks is subject to restricted access, the efficiency in the creation or redemption of units or shares to keep the price of the ETF in line with its net asset value may be disrupted, causing the ETF to trade at a higher premium or discount to its net asset value. Hence, the market price of the Structured Products will also be indirectly subject to these risks.

Synthetic exchange traded funds

Additionally, where the Underlying Asset of Structured Products comprises the units or shares of an ETF adopting a synthetic replication investment strategy to achieve its investment objectives by investing in financial derivative instruments linked to the performance of an underlying asset pool or index that the ETF is designed to track ("**Synthetic ETF**"), you should note that:

(a) investments in financial derivative instruments will expose the Synthetic ETF to the credit, potential contagion and concentration risks of the counterparties who issued such financial derivative instruments. As such counterparties are predominantly international financial institutions, the failure of one such counterparty may have a negative effect on other counterparties of the Synthetic ETF. Even if the Synthetic ETF has collateral to reduce the counterparty risk, there may still be a risk that the market value of the collateral has fallen substantially when the Synthetic ETF seeks to realise the collateral; and

(b) the Synthetic ETF may be exposed to higher liquidity risk if the Synthetic ETF invests in financial derivative instruments which do not have an active secondary market.

The above risks may have a significant impact on the performance of the relevant ETF or Synthetic ETF and hence the market price of Structured Products linked to such ETF or Synthetic ETF.

ETF investing through the QFI regimes and/or China Connect

An ETF may be issued and traded outside Mainland China with direct investment in the Mainland China securities markets through the Qualified Foreign Institutional Investor regime and Renminbi Qualified Foreign Institutional Investor regime (collectively, "**QFI regimes**") and/or the Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect (collectively, "**China Connect**"). Where the Underlying Asset comprises the units or shares of such an ETF ("**China ETF**"), you should note that, amongst others:

(a) the relatively recent introduction and untested nature of China Connect make China ETFs riskier than traditional ETFs investing directly in more developed markets. The policy and rules for the QFI regimes and China Connect prescribed by the Mainland China government are relatively new and subject to change, and there may be uncertainty to their interpretation and/or implementation. The uncertainty and change of the laws and regulations in Mainland China may adversely impact on the performance of China ETFs and the trading price of the relevant units or shares;

(b) a China ETF primarily invests in securities traded in the Mainland China securities markets and is subject to concentration risk. Investment in the Mainland China securities markets (which are inherently stock markets with restricted access) involves certain risks and special considerations as compared with investment in more developed economies or markets, such as greater political, tax, economic, foreign exchange, liquidity and regulatory risks. The operation of a China ETF may also be affected by interventions by the applicable government(s) and regulators in the financial markets;

(c) trading of securities invested by a China ETF under China Connect will be subject to a daily quota which is utilised on a first-come-first-serve basis under the China Connect. In the event that the daily quota under China Connect is reached, the manager may need to suspend creation of further units or shares of such China ETF, and therefore the liquidity in such China ETF may be affected. In such event, the trading price of a unit or share of such China ETF is likely to be at a significant premium to its net asset value, and may be highly volatile. The People's Bank of China and the State Administration of Foreign Exchange have jointly published the detailed implementation rules removing the investment quota under the QFI regimes with effect from 6 June 2020; and

(d) there are risks and uncertainties associated with the current mainland Chinese tax laws applicable to a China ETF investing in the Mainland China through the QFI regimes and/or China Connect. Although such China ETF may have made a tax provision in respect of potential tax liability, the provision may be excessive or inadequate. Any shortfall between the provisions and actual tax liabilities may be covered by the assets of such China ETF and may therefore adversely affect the net asset value of such China ETF and the market value and/or potential payout of the Structured Products.

The above risks may have a significant impact on the performance of the China ETFs and the price of the Structured Products.

Please read the offering documents of the China ETF to understand its key features and risks.

*Real estate investment trust ("**REIT**")*

Where the Underlying Asset comprises the units of a REIT, you should note that the investment objective of a REIT is to invest in a real estate portfolio. Each REIT is exposed to risks relating to investments in real estate, including but not limited to (a) adverse changes in political or economic conditions; (b) changes in interest rates and the availability of debt or equity financing, which may result in an inability by the REIT to maintain or improve the real estate portfolio and finance future acquisitions; (c) changes in environmental, zoning and other governmental rules; (d) changes in market rents; (e) any required repair and maintenance of the portfolio properties; (f) breach of any property laws or regulations; (g) the relative illiquidity of real estate investment; (h) real estate taxes; (i) any hidden interests in the portfolio properties; (j) any increase in insurance premiums and (k) any uninsurable losses.

There may also be disparity between the market price of the units of a REIT and the net asset value per unit. This is because the market price of the units of a REIT also depends on many factors, including but not limited to (a) the market value and perceived prospects of the real estate portfolio; (b) changes in economic or market conditions; (c) changes in market valuations of similar companies; (d) changes in interest rates; (e) the perceived attractiveness of the units of the REIT against those of other equity securities; (f) the future size and liquidity of the market for the units and the REIT market generally; (g) any future changes to the regulatory system, including the tax system and (h) the ability of the REIT to implement its investment and growth strategies and to retain its key personnel.

The above risks may have a significant impact on the performance of the relevant units and the price of the Structured Products.

Commodity market risk

Where the Underlying Asset comprises the units or shares of an ETF whose value relates directly to the value of a commodity, you should note that fluctuations in the price of the commodity could materially adversely affect the value of the underlying units or shares. Commodity markets are generally subject to greater risks than other markets. The price of a commodity is highly volatile. Price movement of a commodity is influenced by, among other things, interest rates, changing market supply and demand relationships, trade, fiscal, monetary and exchange control programmes and policies of governments, and international political and economic events and policies.

Risks relating to CBBCs

Correlation between the price of a CBBC and the price/level of the Underlying Asset

When the Underlying Asset of a CBBC is trading at a price/level close to its Call Price/Call Level, the price of that CBBC tends to be more volatile and any change in the value of that CBBC at such time may be incomparable and disproportionate to the change in the price/level of the Underlying Asset.

Mandatory Call Event is irrevocable except in limited circumstances

A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(a) system malfunction or other technical errors of HKEX (such as the setting up of wrong Call Price/Call Level and other parameters), and such event is reported by the Stock Exchange to us and we and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked; or

(b) manifest errors caused by the relevant third party price source where applicable (such as miscalculation of the index level by the relevant index compiler), and such event is reported by us to the Stock Exchange and we and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached between the Stock Exchange and us no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs or such other time frame as prescribed by the Stock Exchange from time to time. Upon revocation of the Mandatory Call Event, trading of the CBBCs will resume and any trade cancelled after such Mandatory Call Event will be reinstated.

Non-recognition of Post MCE Trades

The Stock Exchange and its recognised exchange controller, HKEX, shall not incur any liability (whether based on contract, tort (including, without limitation, negligence), or any other legal or equitable grounds and without regard to the circumstances giving rise to any purported claim except in the case of wilful misconduct on the part of the Stock Exchange and/or HKEX) for any direct, consequential, special, indirect, economic, punitive, exemplary or any other loss or damage suffered or incurred by us or any other party arising from or in connection with the Mandatory Call Event or the suspension of trading ("**Trading Suspension**") or the non-recognition of trades after a Mandatory Call Event ("**Non-Recognition of Post MCE Trades**"), including without limitation, any delay, failure, mistake or error in the Trading Suspension or Non-Recognition of Post MCE Trades.

We and our affiliates shall not have any responsibility towards you for any losses suffered as a result of the Trading Suspension and/or Non-Recognition of Post MCE Trades in connection with the occurrence of a Mandatory Call Event, notwithstanding that such Trading Suspension or Non-Recognition of Post MCE Trades may have occurred as a result of an error in the observation of the event.

Residual Value will not include residual funding cost

For Category R CBBCs, the Residual Value (if any) payable by us following the occurrence of a Mandatory Call Event will not include the residual funding cost for the CBBCs. You will not receive any residual funding cost back from us upon early termination of a Category R CBBC upon a Mandatory Call Event.

Delay in announcements of a Mandatory Call Event

The Stock Exchange will notify the market as soon as practicable after the CBBC has been called. You must however be aware that there may be delay in the announcements of a Mandatory Call Event due to technical errors or system failures and other factors that are beyond our control or the control of the Stock Exchange.

Unwinding of hedging arrangements

The trading and/or hedging activities of us or our affiliates related to CBBCs and/or other financial instruments issued by us from time to time may have an impact on the price/level of the Underlying Asset which may trigger a Mandatory Call Event and/or affect the Residual Value of the CBBC. In particular, when the Underlying Asset is trading close to the Call Price/Call Level, the unwinding activities of us or our affiliates may cause a fall or rise (as the case may be) in the trading price/level of the Underlying Asset, potentially leading to a Mandatory Call Event and affecting the Residual Value for the CBBCs as a result of such unwinding activities.

In respect of Category N CBBCs, we or our affiliates may unwind any hedging transactions entered into by us in relation to the CBBCs at any time even if such unwinding activities may trigger a Mandatory Call Event.

In respect of Category R CBBCs, we or our affiliates may unwind any hedging transactions entered into by us in relation to the CBBCs at any time even if such unwinding activities may trigger a Mandatory Call Event. Such unwinding activities after the occurrence of a Mandatory Call Event may affect the trading price/level of the Underlying Asset and consequently the Residual Value for the CBBCs.

Risk relating to the legal form of the Structured Products

Each series of Structured Products will be represented by a global certificate registered in the name of HKSCC Nominees Limited (or such other nominee company as may be used by HKSCC from time to time in relation to the provision of nominee services to persons admitted for the time being by HKSCC as a participant of CCASS).

Structured Products issued in global registered form and held on your behalf within a clearing system effectively means that the evidence of your title, as well as the efficiency of ultimate delivery of the Cash Settlement Amount, will be subject to the CCASS Rules. You should be aware of the following risks:

(a) you will not receive definitive certificates where the Structured Products remain in the name of HKSCC Nominees Limited for the entire life of the Structured Products;

(b) any register that is maintained by us or on our behalf, while available for inspection by you, will not be capable of registering any interests other than that of the legal title owner, in other words, it will record at all times that the Structured Products are being held by HKSCC Nominees Limited;

(c) you will have to rely solely upon your broker/custodians and the statements you receive from such party as evidence of your interest in the investment;

(d) notices or announcements will be published on the HKEX website and/or released by HKSCC to its participants via CCASS. You will need to check the HKEX website regularly and/or rely on your brokers/custodians to obtain such notices/announcements; and

(e) following the expiry date and the determination by us as to the Cash Settlement Amount, our obligations to you will be duly performed by payment of the Cash Settlement Amount in accordance with the General Conditions and the relevant Product Conditions to HKSCC Nominees Limited as the "**holder**" of the Structured Products. HKSCC or HKSCC Nominees Limited will then distribute the received Cash Settlement Amount to the respective CCASS participants in accordance with the CCASS Rules.

Fee arrangements with brokers and conflicts of interest of brokers

We may enter into fee arrangements with brokers and/or any of its affiliates with respect to the primary market in the Structured Products. You should note that any brokers with whom we have a fee arrangement does not, and cannot be expected to deal, exclusively in the Structured Products, therefore any broker and/or its subsidiaries or affiliates may from time to time engage in transactions involving the Underlying Assets and/or the structured products of other issuers over the same Underlying Assets to which the particular series of Structured Products may relate, or other underlying assets as the case may be, for their proprietary accounts and/or for the accounts of their clients. The fact that the same broker may deal simultaneously for different clients in competing products in the market place may affect the value of the Structured Products and present certain conflicts of interests.

Effect of the combination of risk factors unpredictable

Two or more risk factors may simultaneously have an effect on the value of a series of Structured Products such that the effect of any individual risk factor may not be predictable. No assurance can be given as to the effect any combination of risk factors may have on the value of a series of Structured Products.

APPENDIX 1 — GENERAL CONDITIONS OF STRUCTURED PRODUCTS

These General Conditions relate to each series of Structured Products and must be read in conjunction with, and are subject to, the relevant Product Conditions set out in Appendix 2 and Appendix 3 to this Base Listing Document and the relevant Launch Announcement and Supplemental Listing Document in relation to the particular series of Structured Products. These General Conditions, the relevant Product Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document together constitute the Conditions of the relevant Structured Products, and will be endorsed on the Global Certificate representing the relevant Structured Products. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Structured Products may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these General Conditions and the relevant Product Conditions, replace or modify these General Conditions and the relevant Product Conditions for the purpose of such series of Structured Products.

1. Definitions

"**Applicable Law**" means any applicable present or future law, rule, regulation, judgment, order or directive of any governmental, administrative, legislative or judicial authority or power;

"**Base Listing Document**" means the base listing document relating to the Structured Products dated 30 May 2023 and issued by the Issuer (including any addenda to such base listing document issued by the Issuer from time to time);

"**Board Lot**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Cash Settlement Amount**" has the meaning given to it in the relevant Product Conditions;

"**CCASS**" means the Central Clearing and Settlement System;

"**CCASS Rules**" means the General Rules of CCASS and the CCASS Operational Procedures in effect from time to time;

"**CCASS Settlement Day**" has the meaning ascribed to the terms "Settlement Day" in the CCASS Rules, subject to such modification and amendment prescribed by HKSCC from time to time;

"**Conditions**" means, in respect of a particular series of Structured Products, these General Conditions and the applicable Product Conditions;

"**Exercise Expenses**" means any charges or expenses including any taxes or duties which are incurred in respect of the exercise of a Board Lot of Structured Products;

"**Expiry Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**General Conditions**" means these general terms and conditions. These General Conditions apply to each series of Structured Products;

"**Global Certificate**" means, in respect of the relevant Structured Products, a global certificate registered in the name of the Nominee;

"**HKEX**" means Hong Kong Exchanges and Clearings Limited;

"**HKSCC**" means Hong Kong Securities Clearing Company Limited;

"**Holder**" means each person who is for the time being shown in the Register as the holder of the Structured Products, and such person shall be treated by the Issuer and the Sponsor as the absolute owner and holder of the Structured Products;

"**Hong Kong**" means the Hong Kong Special Administrative Region of the People's Republic of China;

"**Instrument**" means an instrument by way of deed poll dated 30 May 2006 and executed by the Issuer;

"**Issuer**" means Macquarie Bank Limited;

"**Launch Announcement and Supplemental Listing Document**" means the launch announcement and supplemental listing document relating to a particular series of Structured Products.

"**Nominee**" means HKSCC Nominees Limited (or such other nominee company as may be used by HKSCC from time to time in relation to the provision of nominee services to persons admitted for the time being by HKSCC as a participant of CCASS);

"**Product Conditions**" means, in respect of each series of Structured Product, the product specific terms and conditions that apply to that particular series of Structured Product;

"**Register**" means, in respect of each series of Structured Products, the register of the Holders of such series kept by the Issuer outside of Hong Kong;

"**Sponsor**" means Macquarie Capital Limited;

"**Stock Exchange**" means The Stock Exchange of Hong Kong Limited; and

"**Structured Products**" means standard warrants ("**Warrants**"), callable bull/bear contracts ("**CBBCs**") or such other structured products to be issued by the Issuer from time to time. References to "Structured Products" are to be construed as references to a particular series of Structured Products and, unless the context otherwise requires, any further Structured Products issued pursuant to General Condition 9.

2. Form, Status, Transfer, Title and Additional Costs and Expenses

2.1 The Structured Products are issued in registered form subject to and with the benefit of the Instrument. The Holders are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Instrument. A copy of the Instrument is available for inspection at the offices of the Sponsor.

The Structured Products are represented by a Global Certificate. No definitive certificate will be issued. The Structured Products can only be exercised by HKSCC or the Nominee.

2.2 The settlement obligation of the Issuer in respect of the Structured Products represents general unsecured contractual obligations of the Issuer and of no other person which rank, and will rank, equally among themselves and pari passu with all other present and future unsecured and unsubordinated contractual obligations of the Issuer, except for obligations accorded preference by mandatory provisions of applicable law.

Structured Products represent general contractual obligations of the Issuer, and are not, nor is it the intention (expressed, implicit or otherwise) of the Issuer to create by the issue of structured products, deposit liabilities of the Issuer or a debt obligation of any kind.

2.3 Transfers of Structured Products may be effected only in Board Lots or integral multiples thereof in CCASS in accordance with the CCASS Rules.

2.4 Holders shall note that they shall be responsible for additional costs and expenses in connection with any exercise of the Structured Products including the Exercise Expenses which amount shall, subject to the applicable Product Conditions and to the extent necessary, be payable to the Issuer and collected from the Holders.

3. Rights and Exercise Expenses relating to Structured Products

3.1 Every Board Lot initially entitles the Holder, upon due exercise and upon compliance with the applicable Product Conditions, the rights to receive payment of the Cash Settlement Amount, if any.

3.2 Upon exercise of the Structured Products, the Holder will be required to pay a sum equal to all the expenses resulting from the exercise of such Structured Products. To effect such payment an amount equivalent to the Exercise Expenses shall be deducted from the Cash Settlement Amount in accordance with the applicable Product Conditions.

4. Sponsor

4.1 The Sponsor will not assume any obligation or duty to or any relationship of agency or trust for the Holder.

4.2 The Issuer reserves the right, subject to the appointment of a successor, at any time to vary or terminate the appointment of the initial Sponsor and to appoint another sponsor provided that it will at all times maintain a sponsor in Hong Kong for so long as the Structured Products are listed on the Stock Exchange. Notice of any such termination or appointment will be given to the Holder in accordance with General Condition 8.

5. Purchase

The Issuer or any of its subsidiaries may at any time purchase Structured Products at any price in the open market or by tender or by private treaty. Any Structured Products so purchased may be held or resold or surrendered for cancellation.

6. Global Certificate

A Global Certificate representing the Structured Products will be deposited within CCASS in the name of the Nominee.

7. Meetings of Holders and Modification

7.1 *Meetings of Holders*. The Instrument contains provisions for convening meetings of the Holders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Instrument) of a modification of the provisions of the Structured Products or of the Instrument.

Any resolution to be passed in a meeting of the Holders shall be decided by poll. A meeting may be convened by the Issuer or by Holders holding not less than 10 percent of the Structured Products for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 percent of the Structured Products for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Holders whatever the number of Structured Products so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Holders shall be binding on all the Holders, whether or not they are present at the meeting.

Resolutions can be passed in writing without a meeting of the Holders being held if passed unanimously.

7.2 *Modification*. The Issuer may, without the consent of the Holder, effect any modification of the terms and conditions of the Structured Products or the Instrument which, in the opinion of the Issuer, is:

(a) not materially prejudicial to the interests of the Holder generally (without considering the circumstances of any individual Holder or the tax or other consequences of such modification in any particular jurisdiction);

(b) of a formal, minor or technical nature;

(c) made to correct a manifest error; or

(d) necessary in order to comply with mandatory provisions of the laws or regulations of Hong Kong.

Any such modification shall be binding on the Holder and shall be notified to them by the Issuer as soon as practicable thereafter in accordance with General Condition 8 but failure to give such notice will not affect the validity of such modification.

8. Notices

All notices to the Holder will be validly given if published in English and in Chinese on the HKEX website. In such circumstances, the Issuer shall not be required to despatch copies of the notice to the Holders.

9. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Holder, to create and issue further structured products so as to form a single series with the Structured Products.

10. Illegality or Impracticability

The Issuer is entitled to terminate the Structured Products if it determines in good faith and in a commercially reasonable manner that, for reasons beyond its control, it has become or it will become illegal or impracticable:

(a) for it to perform its obligations under the Structured Products, in whole or in part as a result of:

(i) the adoption of, or any change in, any relevant law or regulation (including any tax law); or

(ii) the promulgation of, or any change in, the interpretation by any court, tribunal, governmental, administrative, legislative, regulatory or judicial authority or power with competent jurisdiction of any relevant law or regulation (including any tax law),

(each of (i) and (ii), a "**Change in Law Event**"); or

(b) for it or any of its affiliates to maintain the Issuer's hedging arrangements with respect to the Structured Products due to a Change in Law Event.

Upon the occurrence of a Change in Law Event, the Issuer will, if and to the extent permitted by the applicable law or regulation, pay to each Holder a cash amount that the Issuer determines in good faith and in a commercially reasonable manner to be the fair market value in respect of each Structured Product held by such Holder immediately prior to such termination (ignoring such illegality or impracticability) less the cost to the Issuer of unwinding any related hedging arrangement as determined by the Issuer in its sole and absolute discretion. Payment will be made to each Holder in such manner as shall be notified to the Holder in accordance with General Condition 8.

11. Good Faith and Commercially Reasonable Manner

Any exercise of discretion by the Issuer under the Conditions will be made in good faith and in a commercially reasonable manner.

12. Contracts (Rights of Third Parties) Ordinance

No person other than the Holder has any right under the Contracts (Rights of Third Parties) Ordinance (Cap. 623 of the Laws of Hong Kong) to enforce or to enjoy the benefit of any term of the Structured Products.

13. Governing Law

The Structured Products and the Instrument are governed by and construed in accordance with the laws of Hong Kong. The Issuer and each Holder (by its purchase of the Structured Products) shall be deemed to have submitted for all purposes in connection with the Structured Products and the Instrument to the non-exclusive jurisdiction of the courts of Hong Kong.

14. Language

A Chinese translation of these General Conditions and the applicable Product Conditions will be made available for collection during normal office hours from the Sponsor's office. In the event of any inconsistency between the Chinese translation and the English version of these General Conditions and/or the applicable Product Conditions, the English version of these General Conditions and/or the applicable Product Conditions shall prevail.

15. Prescription

Claims against the Issuer for payment of any amount in respect of the Structured Products will become void unless made within ten years of the Expiry Date and thereafter, any sums payable in respect of such Structured Products shall be forfeited and shall revert to the Issuer.

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APPENDIX 2 — PRODUCT CONDITIONS OF WARRANTS

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PART A — PRODUCT CONDITIONS OF EUROPEAN STYLE CASH SETTLED WARRANTS OVER SINGLE EQUITIES

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of Warrants. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Average Price**" means the arithmetic mean of the closing prices of one Share (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustments to such closing prices as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) in respect of each Valuation Date;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means:

(a) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Average Price - Exercise Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Exercise Price - Average Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Company**" means the company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Designated Bank Account**" means the relevant bank account designated by the Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Exercise Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on any Valuation Date during the one-half hour period that ends at the close of trading, of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in: (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Product Conditions**" means these product terms and conditions;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (a) the Expiry Date; and (b) the day on which the Average Price is determined in accordance with the Conditions;

"**Share**" means the share specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means each of the five Business Days immediately preceding the Expiry Date, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Shares on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price.

If the postponement of a Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then:

(a) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and

(b) the Issuer shall determine the closing price of the Shares on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

2. Exercise of Warrants

2.1 Warrants may only be exercised in Board Lots or integral multiples thereof.

2.2 The Warrants will automatically be exercised on the Expiry Date, if the Issuer determines that the Cash Settlement Amount (calculated in accordance with these Product Conditions) is positive (without notice being given to the Holder). The Holder will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holder the Cash Settlement Amount (if any) in accordance with Product Condition 2.5.

Any Warrant which has not been automatically exercised in accordance with this Product Condition 2.2 shall expire immediately thereafter and all rights of the Holders and obligations of the Issuer with respect to such Warrant shall cease.

2.3 Any Exercise Expenses which are not determined by the Issuer on the Expiry Date and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.4 Subject to exercise of Warrants in accordance with these Product Conditions, or in the event that Warrants have expired worthless the Issuer will, with effect from the first Business Day following the Expiry Date, remove the name of the Holder from the Register in respect of the number of Warrants which are the subject of a valid exercise or have expired worthless, as the case may be, and thereby cancel the relevant Warrants and, if applicable, cancel the Global Certificate.

2.5 Upon exercise of Warrants in accordance with these Product Conditions, the Issuer will pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

2.6 The Issuer's obligations to pay the Cash Settlement Amount shall be discharged by payment in accordance with Product Condition 2.5.

3. Adjustments

3.1 *Rights Issues*. If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement ("**Rights Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Share price being the closing price of an existing Share as derived from the Daily Quotation Sheet of the Stock Exchange on the last Business Day on which the Shares are traded on a cum-Rights basis

R: Subscription price per new Share specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement immediately prior to the adjustment, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

3.2 *Bonus Issues*. If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement shall be adjusted on the Business Day on which trading in the Shares becomes ex-entitlement ("**Bonus Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Shares (whether a whole or a fraction) received by a holder of Shares for each Share held prior to the Bonus Issue

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Bonus Issue Adjustment Date.

3.3 *Subdivisions and Consolidations.* If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), then:

(a) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivisions; and

(b) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation shall have taken effect.

3.4 *Restructuring Events.* If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion) so that the Warrants shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event and thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected. For the avoidance of doubt, any remaining Shares shall not be affected by this Product Condition 3.4 and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Shares shall include any such cash.

3.5 *Cash Distribution.* No adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative) ("**Ordinary Dividend**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for 2 percent or more of the Share's Closing Price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E: The existing Entitlement immediately prior to the Cash Distribution

S: The closing price of the existing Share as derived from the Daily Quotation Sheet of the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD: The amount of Cash Distribution per Share

OD: The amount of Ordinary Dividend per Share, provided that the Ordinary Dividend and the Cash Distribution shall have the same ex-entitlement date. For the avoidance of doubt, the OD shall be deemed to be zero if the ex-entitlement dates of the relevant Ordinary Dividend and Cash Distribution are different

In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Cash Distribution Adjustment Date.

3.6 *Other Adjustments*. Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.7 *Notice of Determinations*. All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

4. Liquidation

In the event of a liquidation or dissolution of the Company or the appointment of a liquidator, receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, all unexercised Warrants will lapse and shall cease to be valid for any purpose. In the case of voluntary liquidation, the unexercised Warrants will lapse and shall cease to be valid on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

5. Delisting

5.1 If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to the General Conditions and these Product Conditions in such manner and make such adjustments and amendments to the rights attaching to the Warrants as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holder generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of the Holder or the tax or other consequences that may result in any particular jurisdiction).

5.2 Without prejudice to the generality of Product Condition 5.1, where the Shares are, or, upon the delisting, become, listed on any other stock exchange, the Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holder, make such adjustments to the entitlements of the Holder on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

5.3 The Issuer shall determine, in its absolute discretion, any adjustment or amendment and its determination shall be conclusive and binding on the Holder save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Holder in accordance with General Condition 8 as soon as practicable after they are determined.

Sponsor:

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PART B — PRODUCT CONDITIONS OF EUROPEAN STYLE CASH SETTLED INDEX WARRANTS

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of Warrants. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means an amount calculated by the Issuer in accordance with the following formula (and, if appropriate, either (a) converted (if applicable) into the Settlement Currency at the Exchange Rate or, as the case may be, (b) converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(a) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Closing Level - Strike Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

(b) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Strike Level - Closing Level}) \text{ x one Board Lot x Index Currency Amount}}{\text{Divisor}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Designated Bank Account**" means the relevant bank account designated by the Holder;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**First Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 of the Base Listing Document;

"**Index**" means the index specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Business Day**" means any day on which the Index Exchange is scheduled to open for trading for its regular trading sessions;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Currency Amount**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Interim Currency**" means the currency specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on the Valuation Date during the one-half hour period that ends at the close of trading on the Index Exchange, of any of:

  (i) the suspension or material limitation of the trading of a material number of constituent securities that comprise the Index;

  (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

  (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount.

  For the purposes of this paragraph (a), (1) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (2) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by any relevant exchange will constitute a Market Disruption Event;

(b) where the Index Exchange is the Stock Exchange, the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued;

(c) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(d) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate, the First Exchange Rate or the Second Exchange Rate (as the case may be) cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Product Conditions**" means these product terms and conditions;

"**Second Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (a) the Expiry Date; and (b) the day on which the Closing Level is determined in accordance with the Conditions;

"**Strike Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to adjustment in accordance with Product Condition 3;

"**Successor Index Compiler**" has the meaning given to it in Product Condition 3.1; and

"**Valuation Date**" shall have the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, provided that, if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on any Valuation Date, then the Issuer shall determine the Closing Level on the basis of its good faith estimate of the Closing Level that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that the Issuer, if applicable, may, but will not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

2. Exercise of Warrants

2.1 Warrants may only be exercised in Board Lots or integral multiples thereof.

2.2 The Warrants will automatically be exercised on the Expiry Date, if the Issuer determines that the Cash Settlement Amount (calculated in accordance with these Product Conditions) is positive (without notice being given to the Holder). The Holder will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holder the Cash Settlement Amount (if any) in accordance with Product Condition 2.5.

Any Warrant which has not been automatically exercised in accordance with this Product Condition 2.2 shall expire immediately thereafter and all rights of the Holders and obligations of the Issuer with respect to such Warrant shall cease.

2.3 Any Exercise Expenses which are not determined by the Issuer on the Expiry Date and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.4 Subject to exercise of Warrants in accordance with these Product Conditions, or in the event that Warrants have expired worthless the Issuer will, with effect from the first Business Day following the Expiry Date, remove the name of the Holder from the Register in respect of the number of Warrants which are the subject of a valid exercise or have expired worthless, as the case may be, and thereby cancel the relevant Warrants and, if applicable, cancel the Global Certificate.

2.5 Upon exercise of Warrants in accordance with these Product Conditions, the Issuer will pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

2.6 The Issuer's obligations to pay the Cash Settlement Amount shall be discharged by payment in accordance with Product Condition 2.5.

3. Adjustments to the Index

3.1 *Successor Index Compiler Calculates and Reports Index*. If the Index is (a) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer; or (b) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

3.2 *Modification and Cessation of Calculation of Index*. If (a) on or prior to the Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stock, contracts or commodities and other routine events); or (b) on the Valuation Date the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event), then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities/commodities that comprised the Index immediately prior to that change or failure (other than those securities that have since ceased to be listed on the relevant exchange).

3.3 *Other Adjustments*. Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.4 *Notice of Determinations*. All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

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Hong Kong

PART C — PRODUCT CONDITIONS OF EUROPEAN STYLE CASH SETTLED WARRANTS OVER EXCHANGE TRADED FUNDS

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of Warrants may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of Warrants. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Average Price**" means the arithmetic mean of the closing prices of one Unit (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustments to such closing prices as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) in respect of each Valuation Date;

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Cash Settlement Amount**" means:

(a) in the case of a series of call Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Average Price - Exercise Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

(b) in the case of a series of put Warrants:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Exercise Price - Average Price) x one Board Lot}}{\text{Number of Warrant(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Designated Bank Account**" means the relevant bank account designated by the Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Exercise Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Fund**" means the exchange traded fund specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 of the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on any Valuation Date during the one-half hour period that ends at the close of trading, of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in: (i) the Units; or (ii) any options or futures contracts relating to the Units if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Product Conditions**" means these product terms and conditions;

"**Settlement Date**" means the third CCASS Settlement Day after the later of: (a) the Expiry Date; and (b) the day on which the Average Price is determined in accordance with the Conditions;

"**Unit**" means the unit or share of the Fund specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means each of the five Business Days immediately preceding the Expiry Date, provided that if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on any Valuation Date, then that Valuation Date shall be postponed until the first succeeding Business Day on which there is no Market Disruption Event irrespective of whether that postponed Valuation Date would fall on a Business Day that is already or is deemed to be a Valuation Date. For the avoidance of doubt, in the event that a Market Disruption Event has occurred and a Valuation Date is postponed as aforesaid, the closing price of the Units on the first succeeding Business Day will be used more than once in determining the Average Price, so that in no event shall there be less than five closing prices used to determine the Average Price.

If the postponement of a Valuation Date as aforesaid would result in the Valuation Date falling on or after the Expiry Date, then:

(a) the Business Day immediately preceding the Expiry Date (the "**Last Valuation Date**") shall be deemed to be the Valuation Date notwithstanding the Market Disruption Event; and

(b) the Issuer shall determine the closing price of the Units on the basis of its good faith estimate of the price that would have prevailed on the Last Valuation Date but for the Market Disruption Event.

2. Exercise of Warrants

2.1 Warrants may only be exercised in Board Lots or integral multiples thereof.

2.2 The Warrants will automatically be exercised on the Expiry Date, if the Issuer determines that the Cash Settlement Amount (calculated in accordance with these Product Conditions) is positive (without notice being given to the Holder). The Holder will not be required to deliver any exercise notice and the Issuer or its agent will pay to the Holder the Cash Settlement Amount (if any) in accordance with Product Condition 2.5.

Any Warrant which has not been automatically exercised in accordance with this Product Condition 2.2 shall expire immediately thereafter and all rights of the Holders and obligations of the Issuer with respect to such Warrant shall cease.

2.3 Any Exercise Expenses which are not determined by the Issuer on the Expiry Date and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.4 Subject to exercise of Warrants in accordance with these Product Conditions, or in the event that Warrants have expired worthless the Issuer will, with effect from the first Business Day following the Expiry Date, remove the name of the Holder from the Register in respect of the number of Warrants which are the subject of a valid exercise or have expired worthless, as the case may be, and thereby cancel the relevant Warrants and, if applicable, cancel the Global Certificate.

2.5 Upon exercise of Warrants in accordance with these Product Conditions, the Issuer will pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of a Settlement Disruption Event.

2.6 The Issuer's obligations to pay the Cash Settlement Amount shall be discharged by payment in accordance with Product Condition 2.5.

3. Adjustments

3.1 *Rights Issues*. If and whenever the Fund shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement ("**Rights Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Unit price being the closing price of an existing Unit as derived from the Daily Quotation Sheet of the Stock Exchange on the last Business Day on which the Units are traded on a cum-Rights basis

R: Subscription price per new Unit specified in the Rights Offer plus an amount equal to any distributions or other benefits foregone to exercise the Rights

M: Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement immediately prior to the adjustment, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

3.2 *Bonus Issues*. If and whenever the Fund shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip distribution or similar scheme for the time being operated by the Fund or otherwise in lieu of a cash distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement shall be adjusted on the Business Day on which trading in the Units becomes ex-entitlement ("**Bonus Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Units (whether a whole or a fraction) received by a holder of Units for each Unit held prior to the Bonus Issue

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement, then no adjustment will be made. In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Bonus Issue Adjustment Date.

3.3 *Subdivisions and Consolidations.* If and whenever the Fund shall subdivide its Units or any class of its outstanding Units into a greater number of units or shares (a "**Subdivision**") or consolidate the Units or any class of its outstanding Units into a smaller number of units or shares (a "**Consolidation**"), then:

(a) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivisions; and

(b) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Exercise Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation shall have taken effect.

3.4 *Restructuring Events.* If it is announced that the Fund is to or may merge or consolidate with or into any other trust or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Fund is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the Warrants may in the absolute discretion of the Issuer be amended no later than the Business Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion) so that the Warrants shall, after such Restructuring Event, relate to the number of units or shares of the trust(s) or corporation(s) resulting from or surviving such Restructuring Event or other securities (**"Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the Warrants related immediately before such Restructuring Event would have been entitled upon such Restructuring Event and thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected. For the avoidance of doubt, any remaining Units shall not be affected by this Product Condition 3.4 and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Units shall include any such cash.

3.5 *Cash Distribution.* No adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative) ("**Ordinary Distribution**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Fund, such as a cash bonus, special dividend or extraordinary distribution, no adjustment will be made unless the value of the Cash Distribution accounts for 2 percent or more of the Unit's Closing Price on the day of announcement by the Fund.

If and whenever the Fund shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E: The existing Entitlement immediately prior to the Cash Distribution

S: The closing price of the existing Unit as derived from the Daily Quotation Sheet of the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD: The amount of Cash Distribution per Unit

OD: The amount of Ordinary Distribution per Unit, provided that the Ordinary Distribution and the Cash Distribution shall have the same ex-entitlement date. For the avoidance of doubt, the OD shall be deemed to be zero if the ex-entitlement dates of the relevant Ordinary Distribution and Cash Distribution are different

In addition, the Issuer shall adjust the Exercise Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Exercise Price shall take effect on the Cash Distribution Adjustment Date.

3.6 *Other Adjustments.* Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the Warrants as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.7 *Notice of Determinations*. All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

4. Termination or Liquidation

4.1 In the event of a Termination, liquidation or dissolution of the Fund or, if applicable, the trustee of the Fund (including any successor trustee appointed from time to time) ("**Trustee**") (in its capacity as trustee of the Fund) or the appointment of a liquidator, receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets, all unexercised Warrants will lapse and shall cease to be valid for any purpose. In the case of a Termination, the unexercised Warrants will lapse and shall cease to be valid on the effective date of the Termination, in the case of a voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of such Fund's or Trustee's (as the case may be) undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of law.

4.2 For the purpose of this Product Condition 4, "**Termination**" means (a) the Fund is terminated or required to be terminated for whatever reason, or the termination of the Fund commences; (b) the Fund is held or is conceded by the Trustee (where applicable) or the manager of the Fund (including any successor manager appointed from time to time) not to have been constituted or to have been imperfectly constituted; (c) where applicable, the Trustee ceases to be authorised under the Fund to hold the property of the Fund in its name and perform its obligations under the trust deed constituting the Fund; or (d) the Fund ceases to be authorised as an authorised collective investment scheme under the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong).

5. Delisting

5.1 If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to the General Conditions and these Product Conditions in such manner and make such adjustments and amendments to the rights attaching to the Warrants as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holder generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of the Holder or the tax or other consequences that may result in any particular jurisdiction).

5.2 Without prejudice to the generality of Product Condition 5.1, where the Units are, or, upon the delisting, become, listed on any other stock exchange, the Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holder, make such adjustments to the entitlements of the Holder on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

5.3 The Issuer shall determine, in its absolute discretion, any adjustment or amendment and its determination shall be conclusive and binding on the Holder save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Holder in accordance with General Condition 8 as soon as practicable after they are determined.

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APPENDIX 3 — PRODUCT CONDITIONS OF CBBCS

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PART A — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER SINGLE EQUITIES

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Cash Settlement Amount**" means an amount calculated by the Issuer in accordance with the following formula:

(a) following a Mandatory Call Event:

(i) in the case of a series of Category R CBBCs, the Residual Value; or

(ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

(i) in the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price - Strike Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(ii) in the case of a series of bear CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x one Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Price is equal to the Strike Price;

"**Category R CBBCs**" means a series of CBBCs where the Call Price is different from the Strike Price;

"**Closing Price**" means the closing price of one Share (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustments to such closing price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) on the Valuation Date;

"**Company**" means the Company specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 to the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Mandatory Call Event**" occurs when the Spot Price is:

(a) in the case of a series of bull CBBCs, at or below the Call Price; or

(b) in the case of a series of bear CBBCs, at or above the Call Price,

at any time on any Trading Day during the Observation Period;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in: (i) the Shares; or (ii) any options or futures contracts relating to the Shares if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Trade Price**" means the highest Spot Price of the Shares (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session on the Stock Exchange during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Stock Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed, the MCE Valuation Period shall be extended to the end of the subsequent trading session following the 2nd Session during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in its good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Shares is permitted on the Stock Exchange with no limitation imposed. In that case:

(i) the period commencing from the 1st Session up to, and including, the last trading session on the Stock

Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in its good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(i) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(ii) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one session only;

"**Minimum Trade Price**" means the lowest Spot Price of the Shares (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading (Hong Kong time) on the Trading Day immediately preceding the Expiry Date;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means an amount calculated by the Issuer in accordance with the following formula:

(a) in the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Minimum Trade Price - Strike Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(b) in the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Strike Price - Maximum Trade Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

"**Settlement Date**" means the third CCASS Settlement Day after (a) the end of the MCE Valuation Period or (b) the later of: (i) the Expiry Date; and (ii) the day on which the Closing Price is determined in accordance with the Conditions (as the case may be);

"**Share**" means the share specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Spot Price**" means:

(a) in respect of a continuous trading session of the Stock Exchange, the price per Share concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(b) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange (as the case may be), the final Indicative Equilibrium Price (as defined in the Trading Rules) of the Share (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable), as the case may be, in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules),

subject to such modification and amendment prescribed by the Stock Exchange from time to time.

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions;

"**Trading Rules**" means the Rules and Regulations of the Exchange prescribed by the Stock Exchange from time to time; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date unless, in the determination of the Issuer, a Market Disruption Event has occurred on that day in which case, the Valuation Date shall be the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event occurring on each of the four Trading Days immediately following the original date which (but for the Market Disruption Event) would have been the Valuation Date. In that case:

(a) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date (regardless of the Market Disruption Event); and

(b) the Issuer shall determine the Closing Price having regard to the then prevailing market conditions, the last reported trading price of the Share on the Stock Exchange and such other factors as the Issuer determines to be relevant.

2. Exercise of CBBCs

2.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

2.2 *Automatic exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date if the Cash Settlement Amount is positive. Any CBBCs which have not been automatically exercised will expire worthless.

2.3 *Mandatory Call Event*

(a) Subject to Product Condition 2.3(b) below, following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer shall have no further obligation under the CBBCs except for the payment of the Cash Settlement Amount (if any) on the relevant Settlement Date. The Issuer will notify the Holders of the occurrence of the Mandatory Call Event in accordance with General Condition 8. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and any Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of HKEX and such event is reported by the Stock Exchange to the Issuer and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked; or

(ii) manifest errors caused by the relevant third party where applicable and such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs or such other time frame as prescribed by the Stock Exchange from time to time.

In both cases, the Mandatory Call Event so triggered will be reversed; and all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume as soon as practicable in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

2.4 *Entitlement*

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

2.5 *Cancellation*

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date or in the event that the CBBCs have expired worthless, the Issuer will, with effect from the first Business Day following the MCE Valuation Period or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

2.6 *Exercise Expenses*

Any Exercise Expenses which are not determined by the Issuer by the end of the MCE Valuation Period or the Expiry Date (as the case may be) and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.7 *Cash Settlement*

Upon early termination of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of the Settlement Disruption Event.

2.8 *Responsibility of Issuer and Sponsor*

None of the Issuer, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to the Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions. The purchase of CBBCs does not confer on any Holder of such CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the Shares.

2.9 *Liability of Issuer and Sponsor*

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

2.10 *Trading*

Subject to Product Condition 2.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date,

whichever is the earlier.

3. Adjustments

3.1 *Rights Issues*

If and whenever the Company shall, by way of Rights (as defined below), offer new Shares for subscription at a fixed subscription price to the holders of existing Shares pro rata to existing holdings (a "**Rights Offer**"), the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement ("**Rights Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Share price being the closing price of an existing Share as derived from the Daily Quotation Sheet of the Stock Exchange on the last Business Day on which the Shares are traded on a cum-Rights basis

R: Subscription price per new Share specified in the Rights Offer plus an amount equal to any dividends or other benefits foregone to exercise the Rights

M: Number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement immediately prior to the adjustment, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Share or needed to acquire one new Share (as the case may be) which are given to the holders of existing Shares to subscribe at a fixed subscription price for new Shares pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

3.2 *Bonus Issues*

If and whenever the Company shall make an issue of Shares credited as fully paid to the holders of Shares generally by way of capitalisation of profits or reserves (other than pursuant to a scrip dividend or similar scheme for the time being operated by the Company or otherwise in lieu of a cash dividend and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement shall be adjusted on the Business Day on which trading in the Shares becomes ex-entitlement ("**Bonus Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Shares (whether a whole or a fraction) received by a holder of Shares for each Share held prior to the Bonus Issue

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Bonus Issue Adjustment Date.

3.3 *Subdivisions and Consolidations*

If and whenever the Company shall subdivide its Shares or any class of its outstanding share capital comprised of the Shares into a greater number of shares (a "**Subdivision**") or consolidate the Shares or any class of its outstanding share capital comprised of the Shares into a smaller number of shares (a "**Consolidation**"), then:

(a) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivisions; and

(b) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation shall have taken effect.

3.4 *Restructuring Events*

If it is announced that the Company is to or may merge or consolidate with or into any other corporation (including becoming, by agreement or otherwise, a subsidiary of or controlled by any person or corporation) (except where the Company is the surviving corporation in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer be amended no later than the Trading Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion) so that the CBBCs shall, after such Restructuring Event, relate to the number of shares of the corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Shares, as the case may be, to which the holder of such number of Shares to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event and thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected. For the avoidance of doubt, any remaining Shares shall not be affected by this Product Condition 3.4 and, where cash is offered in substitution for Shares or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Shares shall include any such cash.

3.5 *Cash Distribution*

No adjustment will be made for an ordinary cash dividend (whether or not it is offered with a scrip alternative) ("**Ordinary Dividend**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Company, such as a cash bonus, special dividend or extraordinary dividend, no adjustment will be made unless the value of the Cash Distribution accounts for 2 percent or more of the Share's Closing Price on the day of announcement by the Company.

If and whenever the Company shall make a Cash Distribution credited as fully paid to the holders of Shares generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Shares becomes ex-entitlement ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E: The existing Entitlement immediately prior to the Cash Distribution

S: The closing price of the existing Share as derived from the Daily Quotation Sheet of the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD: The amount of Cash Distribution per Share

OD: The amount of Ordinary Dividend per Share, provided that the Ordinary Dividend and the Cash Distribution shall have the same ex-entitlement date. For the avoidance of doubt, the OD shall be deemed to be zero if the ex-entitlement dates of the relevant Ordinary Dividend and Cash Distribution are different

In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Cash Distribution Adjustment Date.

3.6 *Other Adjustments*

Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.7 *Notice of Determinations*

All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

4. Liquidation

In the event of a liquidation or dissolution of the Company or the appointment of a liquidator, receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, all unexercised CBBCs will lapse and shall cease to be valid for any purpose. In the case of voluntary liquidation, the unexercised CBBCs will lapse and shall cease to be valid on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of the Applicable Law.

5. Delisting

5.1 If at any time the Shares cease to be listed on the Stock Exchange, the Issuer shall give effect to the General Conditions and these Product Conditions in such manner and make such adjustments and amendments to the rights attaching to the CBBCs as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holder generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of the Holder or the tax or other consequences that may result in any particular jurisdiction).

5.2 Without prejudice to the generality of Product Condition 5.1, where the Shares are, or, upon the delisting, become, listed on any other stock exchange, the Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holder, make such adjustments to the entitlements of the Holder on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

5.3 The Issuer shall determine, in its absolute discretion, any adjustment or amendment and its determination shall be conclusive and binding on the Holder save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Holder in accordance with General Condition 8 as soon as practicable after they are determined.

Sponsor:

Macquarie Capital Limited
Level 22
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1 Harbour View Street
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Hong Kong

PART B — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER AN INDEX

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Cash Settlement Amount**" means an amount calculated by the Issuer in accordance with the following formula (and, if appropriate, either (a) converted (if applicable) into the Settlement Currency at the Exchange Rate or, as the case may be, (b) converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(a) following a Mandatory Call Event:

(i) in the case of a series of Category R CBBCs, the Residual Value; or

(ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

(i) in the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Closing Level} - \text{Strike Level}) \times \text{Index Currency Amount} \times \text{One Board Lot}}{\text{Divisor}}$$

(ii) in the case of a series of bear CBBC:

$$\text{Cash Settlement Amount per Board Lot} = \frac{(\text{Strike Level} - \text{Closing Level}) \times \text{Index Currency Amount} \times \text{One Board Lot}}{\text{Divisor}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Level is equal to the Strike Level;

"**Category R CBBCs**" means a series of CBBCs where the Call Level is different from the Strike Level;

"**Closing Level**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Divisor**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**First Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 to the Base Listing Document;

"**Index**" means the index specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Index Business Day**" means any day on which the Index Exchange is scheduled to open for trading for its regular trading sessions;

"**Index Compiler**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Index Currency Amount**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Index Exchange**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Interim Currency**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Mandatory Call Event**" occurs when the Spot Level is:

(a) in the case of a series of bull CBBCs, at or below the Call Level; or

(b) in the case of a series of bear CBBCs, at or above the Call Level,

at any time on any Index Business Day during the Observation Period;

"**Market Disruption Event**" means:

(a) the occurrence or existence, on any Trading Day or Index Business Day during the one-half hour period that ends at the close of trading on the Index Exchange, of any of the following events:

  (i) the suspension or material limitation of the trading of a material number of constituent securities that comprise the Index;

  (ii) the suspension or material limitation of the trading of options or futures contracts relating to the Index on any exchanges on which such contracts are traded; or

  (iii) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount.

  For the purposes of this paragraph (a), (1) the limitation of the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any relevant exchange, and (2) a limitation on trading imposed by reason of the movements in price exceeding the levels permitted by the relevant exchange will constitute a Market Disruption Event;

(b) where the Index Exchange is the Stock Exchange, the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued;

(c) a limitation or closure of the Index Exchange due to any unforeseen circumstances; or

(d) any circumstances beyond the control of the Issuer in which the Closing Level or, if applicable, the Exchange Rate, the First Exchange Rate or the Second Exchange Rate (as the case may be) cannot be determined by the Issuer in the manner set out in these Product Conditions or in such other manner as the Issuer considers appropriate at such time after taking into account all the relevant circumstances;

"**Maximum Index Level**" means the highest Spot Level during the MCE Valuation Period;

"**MCE Valuation Period**" means:

(a) in respect of an Index Exchange located in Hong Kong, the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session on the Index Exchange during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Index Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which the Spot Levels are available, the MCE Valuation Period shall be extended to the end of the subsequent trading session on the Index Exchange following the 2nd Session during which Spot Levels are available for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in its good faith that each trading session on each of the four Index Business Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which Spot Levels are available. In that case:

    (i) the period commencing from the 1st Session up to, and including, the last trading session of the fourth Index Business Day on the Index Exchange immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

    (ii) the Issuer shall determine the Maximum Index Level or the Minimum Index Level (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Level of the Index and such other factors as the Issuer may determine to be relevant in its good faith.

    For the avoidance of doubt, all Spot Levels available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Index Level or the Minimum Index Level (as the case may be) for the calculation of the Residual Value.

    For the purposes of this definition,

    (i) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

    (ii) the afternoon session and the closing auction session (if any) of the same day,

    shall each be considered as one session only; and

(b) in respect of an Index Exchange located outside Hong Kong, the period specified in the relevant Launch Announcement and Supplemental Listing Document;

"**Minimum Index Level**" means the lowest Spot Level during the MCE Valuation Period;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading (Hong Kong time) on the Trading Day immediately preceding the Expiry Date;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Price Source**", if applicable, has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means an amount calculated by the Issuer in accordance with the following formula (and, if appropriate, either (a) converted (if applicable) into the Settlement Currency at the Exchange Rate or, as the case may be, (b) converted into the Interim Currency at the First Exchange Rate and then (if applicable) converted into Settlement Currency at the Second Exchange Rate):

(i) in the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{(\text{Minimum Index Level} - \text{Strike Level}) \times \text{Index Currency Amount} \times \text{One Board Lot}}{\text{Divisor}}$$

(ii) in the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{(\text{Strike Level} - \text{Maximum Index Level}) \times \text{Index Currency Amount} \times \text{One Board Lot}}{\text{Divisor}}$$

"**Second Exchange Rate**" means the rate specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Settlement Currency**" means the currency specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Settlement Date**" means the third CCASS Settlement Day after (a) the end of the MCE Valuation Period or (b) the later of: (i) the Expiry Date; and (ii) the day on which the Closing Level is determined in accordance with the Conditions (as the case may be);

"**Spot Level**" means:

(a) if no Price Source is specified, the spot level of the Index as compiled and published by the Index Compiler; or

(b) if a Price Source is specified, the spot level of the Index as published on the Price Source;

"**Strike Level**" means the level specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions; and

"**Valuation Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document, provided that, if the Issuer determines, in its sole discretion, that a Market Disruption Event has occurred on the Valuation Date, then the Issuer shall determine the Closing Level of the Index on the basis of its good faith estimate of the Closing Level that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that the Issuer may, but will not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

2. Exercise of CBBCs

2.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

2.2 *Automatic exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date if the Cash Settlement Amount is positive. Any CBBCs which have not been automatically exercised will expire worthless.

2.3 *Mandatory Call Event*

(a) Subject to Product Condition 2.3(b) below, following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer shall have no further obligation under the CBBCs except for the payment of the Cash Settlement Amount (if any) on the relevant Settlement Date. The Issuer will notify the Holders of the occurrence of the Mandatory Call Event in accordance with General Condition 8. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and any Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of HKEX and such event is reported by the Stock Exchange to the Issuer and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked; or

(ii) manifest errors caused by the relevant third party where applicable (such as miscalculation of the index level by the Index Compiler) and such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs or such other time frame as prescribed by the Stock Exchange from time to time.

In both cases, the Mandatory Call Event so triggered will be reversed; and all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume as soon as practicable in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

2.4 *Entitlement*

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

2.5 *Cancellation*

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date or in the event that the CBBCs have expired worthless, the Issuer will, with effect from the first Business Day following the MCE Valuation Period or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

2.6 *Exercise Expenses*

Any Exercise Expenses which are not determined by the Issuer by the end of the MCE Valuation Period or the Expiry Date (as the case may be) and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.7 *Cash Settlement*

Upon early termination of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of the Settlement Disruption Event.

2.8 *Responsibility of Issuer and Sponsor*

None of the Issuer, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to the Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions. The purchase of CBBCs does not confer on any Holder of such CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the constituent securities comprising the Index.

2.9 *Liability of Issuer and Sponsor*

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

2.10 *Trading*

Subject to Product Condition 2.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date, whichever is the earlier.

3. Adjustments to the Index

3.1 *Successor Index Compiler Calculates and Reports Index*

If the Index is:

(a) not calculated and announced by the Index Compiler but is calculated and published by a successor to the Index Compiler (the "**Successor Index Compiler**") acceptable to the Issuer; or

(b) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index,

then the Index will be deemed to be the index so calculated and announced by the Successor Index Compiler or that successor index, as the case may be.

3.2 *Modification and Cessation of Calculation of Index*

If:

(a) on or prior to the Valuation Date, the Index Compiler or (if applicable) the Successor Index Compiler makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent securities and other routine events); or

(b) on the Valuation Date, the Index Compiler or (if applicable) the Successor Index Compiler fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities that comprised the Index immediately prior to that change or failure (other than those securities that have since ceased to be listed on the relevant exchange).

3.3 *Other Adjustments*

Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.4 *Notice of Determinations*

All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

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PART C — PRODUCT CONDITIONS OF CASH SETTLED CALLABLE BULL/BEAR CONTRACTS OVER EXCHANGE TRADED FUNDS

These Product Conditions will, together with the General Conditions and the supplemental provisions contained in the relevant Launch Announcement and Supplemental Listing Document and subject to completion and amendment, be endorsed on the Global Certificate. The relevant Launch Announcement and Supplemental Listing Document in relation to the issue of any series of CBBCs may specify additional terms and conditions which shall, to the extent so specified or to the extent they are inconsistent with these Product Conditions, replace or modify these Product Conditions for the purpose of such series of CBBCs. Capitalised terms used in these Product Conditions and not otherwise defined herein shall have the meanings given to them in the General Conditions or the relevant Launch Announcement and Supplemental Listing Document.

1. Definitions

For the purposes of these Product Conditions:

"**Business Day**" means a day (excluding Saturdays) on which the Stock Exchange is scheduled to open for dealings in Hong Kong and banks are open for business in Hong Kong;

"**Call Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Cash Settlement Amount**" means an amount calculated by the Issuer in accordance with the following formula:

(a) following a Mandatory Call Event:

(i) in the case of a series of Category R CBBCs, the Residual Value; or

(ii) in the case of a series of Category N CBBCs, zero; and

(b) at expiry:

(i) in the case of a series of bull CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Closing Price – Strike Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(ii) in the case of a series of bear CBBCs:

$$\text{Cash Settlement Amount per Board Lot} = \frac{\text{Entitlement x (Strike Price – Closing Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

For the avoidance of doubt, if the Cash Settlement Amount is a negative figure, it shall be deemed to be zero;

"**Category N CBBCs**" means a series of CBBCs where the Call Price is equal to the Strike Price;

"**Category R CBBCs**" means a series of CBBCs where the Call Price is different from the Strike Price;

"**Closing Price**" means the closing price of one Unit (as derived from the Daily Quotation Sheet of the Stock Exchange, subject to any adjustments to such closing price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) on the Valuation Date;

"**Designated Bank Account**" means the relevant bank account designated by each Holder;

"**Entitlement**" means the number specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Fund**" means the exchange traded fund specified as such in the relevant Launch Announcement and

Supplemental Listing Document;

"**General Conditions**" means the general terms and conditions of Structured Products set out in Appendix 1 to the Base Listing Document;

"**Listing Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Mandatory Call Event**" occurs when the Spot Price is:

(a) in the case of a series of bull CBBCs, at or below the Call Price; or

(b) in the case of a series of bear CBBCs, at or above the Call Price,

at any time on any Trading Day during the Observation Period;

"**Market Disruption Event**" means:

(a) the occurrence or existence on any Trading Day during the one-half hour period that ends at the close of trading of any suspension of or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Stock Exchange or otherwise) on the Stock Exchange in: (i) the Units; or (ii) any options or futures contracts relating to the Units if, in any such case, such suspension or limitation is, in the determination of the Issuer, material;

(b) the issuance of the tropical cyclone warning signal number 8 or above or the issuance of a "BLACK" rainstorm signal on any day which either (i) results in the Stock Exchange being closed for trading for an entire day; or (ii) results in the Stock Exchange being closed prior to its regular time for close of trading for the relevant day (for the avoidance of doubt, in the case when the Stock Exchange is scheduled to open for the morning trading session only, closed prior to its regular time for close of trading for the morning session), PROVIDED THAT there shall be no Market Disruption Event solely by reason of the Stock Exchange opening for trading later than its regular time for the opening of trading on any day as a result of the tropical cyclone warning signal number 8 or above or the "BLACK" rainstorm signal having been issued; or

(c) a limitation or closure of the Stock Exchange due to any unforeseen circumstances;

"**Maximum Trade Price**" means the highest Spot Price of the Units (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**MCE Valuation Period**" means the period commencing from and including the moment upon which the Mandatory Call Event occurs (the trading session on the Stock Exchange during which the Mandatory Call Event occurs is the "**1st Session**") and up to the end of the trading session on the Stock Exchange immediately following the 1st Session ("**2nd Session**") unless, in the determination of the Issuer in its good faith, the 2nd Session for any reason (including, without limitation, a Market Disruption Event occurring and subsisting in the 2nd Session) does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed, the MCE Valuation Period shall be extended to the end of the subsequent trading session following the 2nd Session during which trading in the Units is permitted on the Stock Exchange with no limitation imposed for a continuous period of at least 1 hour notwithstanding the existence or continuance of a Market Disruption Event in such postponed trading session, unless the Issuer determines in its good faith that each trading session on each of the four Trading Days immediately following the date on which the Mandatory Call Event occurs does not contain any continuous period of 1 hour or more than 1 hour during which trading in the Units is permitted on the Stock Exchange with no limitation imposed. In that case:

(i) the period commencing from the 1st Session up to, and including, the last trading session on the Stock Exchange of the fourth Trading Day immediately following the date on which the Mandatory Call Event occurs shall be deemed to be the MCE Valuation Period; and

(ii) the Issuer shall determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) having regard to the then prevailing market conditions, the last reported Spot Price and such other factors as the Issuer may determine to be relevant in its good faith.

For the avoidance of doubt, all Spot Prices available throughout the extended MCE Valuation Period shall be taken into account to determine the Maximum Trade Price or the Minimum Trade Price (as the case may be) for the calculation of the Residual Value.

For the purposes of this definition,

(i) the pre-opening session, the morning session and, in the case of half day trading, the closing auction session (if any) of the same day; and

(ii) the afternoon session and the closing auction session (if any) of the same day,

shall each be considered as one session only;

"**Minimum Trade Price**" means the lowest Spot Price of the Units (subject to any adjustment to such Spot Price as may be necessary to reflect any event as contemplated in Product Condition 3 such as capitalisation, rights issue, distribution or the like) during the MCE Valuation Period;

"**Observation Commencement Date**" means the date specified as such in the relevant Launch Announcement and Supplemental Listing Document;

"**Observation Period**" means the period commencing from and including the Observation Commencement Date up to and including the close of trading (Hong Kong time) on the Trading Day immediately preceding the Expiry Date;

"**Post MCE Trades**" has the meaning given to it in the relevant Launch Announcement and Supplemental Listing Document, subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Product Conditions**" means these product terms and conditions;

"**Residual Value**" means an amount calculated by the Issuer in accordance with the following formula:

(a) in the case of a series of bull CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Minimum Trade Price - Strike Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

(b) in the case of a series of bear CBBCs:

$$\text{Residual Value per Board Lot} = \frac{\text{Entitlement x (Strike Price - Maximum Trade Price) x One Board Lot}}{\text{Number of CBBC(s) per Entitlement}}$$

"**Settlement Date**" means the third CCASS Settlement Day after (a) the end of the MCE Valuation Period or (b) the later of: (i) the Expiry Date; and (ii) the day on which the Closing Price is determined in accordance with the Conditions (as the case may be);

"**Spot Price**" means:

(a) in respect of a continuous trading session of the Stock Exchange, the price per Unit concluded by means of automatic order matching on the Stock Exchange as reported in the official real-time dissemination mechanism for the Stock Exchange during such continuous trading session in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules); and

(b) in respect of a pre-opening session or a closing auction session (if applicable) of the Stock Exchange (as the case may be), the final Indicative Equilibrium Price (as defined in the Trading Rules) of the Unit (if any) calculated at the end of the pre-order matching period of such pre-opening session or closing auction session (if applicable), as the case may be, in accordance with the Trading Rules, excluding direct business (as defined in the Trading Rules), subject to such modification and amendment prescribed by the Stock Exchange from time to time;

"**Strike Price**" means the price specified as such in the relevant Launch Announcement and Supplemental Listing Document, subject to any adjustment in accordance with Product Condition 3;

"**Trading Day**" means any day on which the Stock Exchange is scheduled to open for trading for its regular trading sessions;

"**Trading Rules**" means the Rules and Regulations of the Exchange prescribed by the Stock Exchange from time to time;

"**Unit**" means the unit or share of the Fund specified as such in the relevant Launch Announcement and Supplemental Listing Document; and

"**Valuation Date**" means the Trading Day immediately preceding the Expiry Date unless, in the determination of the Issuer, a Market Disruption Event has occurred on that day in which case, the Valuation Date shall be the first succeeding Trading Day on which the Issuer determines that there is no Market Disruption Event, unless the Issuer determines that there is a Market Disruption Event occurring on each of the four Trading Days immediately following the original date which (but for the Market Disruption Event) would have been the Valuation Date. In that case:

(a) the fourth Trading Day immediately following the original date shall be deemed to be the Valuation Date (regardless of the Market Disruption Event); and

(b) the Issuer shall determine the Closing Price having regard to the then prevailing market conditions, the last reported trading price of the Unit on the Stock Exchange and such other factors as the Issuer determines to be relevant.

2. Exercise of CBBCs

2.1 *Exercise of CBBCs in Board Lots*

CBBCs may only be exercised in Board Lots or integral multiples thereof.

2.2 *Automatic exercise*

If no Mandatory Call Event has occurred during the Observation Period, the CBBCs will be deemed to be automatically exercised on the Expiry Date if the Cash Settlement Amount is positive. Any CBBCs which have not been automatically exercised will expire worthless.

2.3 *Mandatory Call Event*

(a) Subject to Product Condition 2.3(b) below, following a Mandatory Call Event, the CBBCs will be terminated automatically and the Issuer shall have no further obligation under the CBBCs except for the payment of the Cash Settlement Amount (if any) on the relevant Settlement Date. The Issuer will notify the Holders of the occurrence of the Mandatory Call Event in accordance with General Condition 8. Trading in the CBBCs will be suspended immediately upon the occurrence of a Mandatory Call Event and any Post MCE Trades will be cancelled and will not be recognised by the Stock Exchange or the Issuer.

(b) A Mandatory Call Event is irrevocable unless it is triggered as a result of any of the following events:

(i) system malfunction or other technical errors of HKEX and such event is reported by the Stock Exchange to the Issuer and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked; or

(ii) manifest errors caused by the relevant third party where applicable and such event is reported by the Issuer to the Stock Exchange, and the Issuer and the Stock Exchange mutually agree that such Mandatory Call Event is to be revoked,

in each case, such mutual agreement must be reached no later than 30 minutes before the commencement of trading (including the pre-opening session) (Hong Kong time) on the Trading Day of the Stock Exchange immediately following the day on which the Mandatory Call Event occurs or such other time frame as prescribed by the Stock Exchange from time to time.

In both cases, the Mandatory Call Event so triggered will be reversed; and all cancelled trades (if any) will be reinstated and trading of the CBBCs will resume as soon as practicable in accordance with the rules and/or requirements prescribed by the Stock Exchange from time to time.

2.4 *Entitlement*

Every Board Lot of CBBCs entitles the Holder to receive from the Issuer on the Settlement Date the Cash Settlement Amount (if any).

2.5 *Cancellation*

Upon early expiration of the CBBCs at the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date or in the event that the CBBCs have expired worthless, the Issuer will, with effect from the first Business Day following the MCE Valuation Period or the Expiry Date (as the case may be) remove the name of the Holder from the Register in respect of the number of CBBCs which have expired or exercised (as the case may be) and thereby cancel the relevant CBBCs and if applicable, the Global Certificate.

2.6 *Exercise Expenses*

Any Exercise Expenses which are not determined by the Issuer by the end of the MCE Valuation Period or the Expiry Date (as the case may be) and not deducted from the Cash Settlement Amount prior to delivery to the Holder in accordance with Product Condition 2, shall be notified by the Issuer to the Holder as soon as practicable after determination thereof and shall be paid by the Holder to the Issuer immediately upon demand.

2.7 *Cash Settlement*

Upon early termination of the CBBCs following the occurrence of a Mandatory Call Event or an automatic exercise of the CBBCs on the Expiry Date (as the case may be), the Issuer will, in respect of every Board Lot, pay the Cash Settlement Amount minus the determined Exercise Expenses to the relevant Holder. If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

The aggregate Cash Settlement Amount minus the determined aggregate Exercise Expenses shall be despatched no later than the Settlement Date by crediting that amount in accordance with the CCASS Rules, to the Designated Bank Account.

If as a result of an event beyond the control of the Issuer ("**Settlement Disruption Event**"), it is not possible for the Issuer to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder on the original Settlement Date, the Issuer shall use its reasonable endeavours to procure payment electronically through CCASS by crediting the relevant Designated Bank Account of the Holder as soon as reasonably practicable after the original Settlement Date. The Issuer will not be liable to the Holder for any interest in respect of the amount due or any loss or damage that such Holder may suffer as a result of the existence of the Settlement Disruption Event.

2.8 *Responsibility of Issuer and Sponsor*

None of the Issuer, the Sponsor or their respective agents shall have any responsibility for any errors or omissions in the calculation and dissemination of any variables published by a third party and used in any calculation made pursuant to the Conditions or in the calculation of the Cash Settlement Amount arising from such errors or omissions. The purchase of CBBCs does not confer on any Holder of such

CBBCs any rights (whether in respect of voting, distributions or otherwise) in relation to the Units.

2.9 *Liability of Issuer and Sponsor*

Exercise and settlement of the CBBCs is subject to all applicable laws, rules, regulations and guidelines in force at the relevant time and neither the Issuer nor the Sponsor shall incur any liability whatsoever if it is unable to effect the transactions contemplated, after using all reasonable efforts, as a result of any such laws, rules, regulations or guidelines. Neither the Issuer nor the Sponsor shall under any circumstances be liable for any acts or defaults of the CCASS in relation to the performance of its duties in relation to the CBBCs.

2.10 *Trading*

Subject to Product Condition 2.3(b), trading in CBBCs on the Stock Exchange shall cease:

(a) immediately upon the occurrence of a Mandatory Call Event; or

(b) at the close of trading for the Trading Day immediately preceding the Expiry Date,

whichever is the earlier.

3. Adjustments

3.1 *Rights Issues*

If and whenever the Fund shall, by way of Rights (as defined below), offer new Units for subscription at a fixed subscription price to the holders of existing Units pro rata to existing holdings (a "**Rights Offer**"), the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement ("**Rights Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{1 + M}{1 + (R/S) \times M}$$

E: Existing Entitlement immediately prior to the Rights Offer

S: Cum-Rights Unit price being the closing price of an existing Unit as derived from the Daily Quotation Sheet of the Stock Exchange on the last Business Day on which the Units are traded on a cum-Rights basis

R: Subscription price per new Unit specified in the Rights Offer plus an amount equal to any distributions or other benefits foregone to exercise the Rights

M: Number of new Unit(s) (whether a whole or a fraction) per existing Unit each holder thereof is entitled to subscribe

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement immediately prior to the adjustment, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Rights Issue Adjustment Date.

For the purposes of these Product Conditions:

"**Rights**" means the right(s) attached to each existing Unit or needed to acquire one new Unit (as the case may be) which are given to the holders of existing Units to subscribe at a fixed subscription price for new Units pursuant to the Rights Offer (whether by the exercise of one Right, a part of a Right or an aggregate number of Rights).

3.2 *Bonus Issues*

If and whenever the Fund shall make an issue of Units credited as fully paid to the holders of Units generally (other than pursuant to a scrip distribution or similar scheme for the time being operated by the Fund or otherwise in lieu of a cash distribution and without any payment or other consideration being made or given by such holders) (a "**Bonus Issue**") the Entitlement shall be adjusted on the Business Day on which trading in the Units becomes ex-entitlement ("**Bonus Issue Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

Adjustment Factor = 1 + N

E: Existing Entitlement immediately prior to the Bonus Issue

N: Number of additional Units (whether a whole or a fraction) received by a holder of Units for each Unit held prior to the Bonus Issue

Provided that if the above formula would result in an adjustment to the Entitlement which would amount to one percent or less of the Entitlement, then no adjustment will be made. In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Bonus Issue Adjustment Date.

3.3 *Subdivisions and Consolidations*

If and whenever the Fund shall subdivide its Units or any class of its outstanding Units into a greater number of units or shares (a "**Subdivision**") or consolidate the Units or any class of its outstanding Units into a smaller number of units or shares (a "**Consolidation**"), then:

(a) in the case of a Subdivision, the Entitlement in effect immediately prior thereto will be increased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be decreased in the same ratio as the Subdivisions; and

(b) in the case of a Consolidation, the Entitlement in effect immediately prior thereto will be decreased whereas the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) will be increased in the same ratio as the Consolidation,

in each case on the day on which the Subdivision or Consolidation shall have taken effect.

3.4 *Restructuring Events*

If it is announced that the Fund is to or may merge with or into another trust or consolidate with or into any other trust or corporation (including becoming, by agreement or otherwise, controlled by any person or corporation) (except where the Fund is the surviving entity in a merger) or that it is to or may sell or transfer all or substantially all of its assets, the rights attaching to the CBBCs may in the absolute discretion of the Issuer be amended no later than the Trading Day preceding the consummation of such merger, consolidation, sale or transfer (each a "**Restructuring Event**") (as determined by the Issuer in its absolute discretion) so that the CBBCs shall, after such Restructuring Event, relate to the number of units or shares of the trust(s) or corporation(s) resulting from or surviving such Restructuring Event or other securities ("**Substituted Securities**") and/or cash offered in substitution for the affected Units, as the case may be, to which the holder of such number of Units to which the CBBCs related immediately before such Restructuring Event would have been entitled upon such Restructuring Event and thereafter the provisions hereof shall apply to such Substituted Securities, provided that any Substituted Securities may, in the absolute discretion of the Issuer, be deemed to be replaced by an amount in the relevant currency equal to the market value or, if no market value is available, fair value, of such Substituted Securities in each case as determined by the Issuer as soon as practicable after such Restructuring Event is effected. For the avoidance of doubt, any remaining Units shall not be affected by this Product Condition 3.4 and, where cash is offered in substitution for Units or is deemed to replace Substituted Securities as described above, references in these Product Conditions to the Units shall include any such cash.

3.5 *Cash Distribution*

No adjustment will be made for an ordinary cash distribution (whether or not it is offered with a scrip alternative) ("**Ordinary Distribution**"). For any other forms of cash distribution ("**Cash Distribution**") announced by the Fund, such as a cash bonus, special distribution or extraordinary distribution, no adjustment will be made unless the value of the Cash Distribution accounts for 2 percent or more of the Unit's Closing Price on the day of announcement by the Fund.

If and whenever the Fund shall make a Cash Distribution credited as fully paid to the holders of Units generally, the Entitlement shall be adjusted to take effect on the Business Day on which trading in the Units becomes ex-entitlement ("**Cash Distribution Adjustment Date**") in accordance with the following formula:

Adjusted Entitlement = Adjustment Factor x E

Where:

$$\text{Adjustment Factor} = \frac{S - OD}{S - OD - CD}$$

E: The existing Entitlement immediately prior to the Cash Distribution

S: The closing price of the existing Unit as derived from the Daily Quotation Sheet of the Stock Exchange on the Business Day immediately preceding the Cash Distribution Adjustment Date

CD: The amount of Cash Distribution per Unit

OD: The amount of Ordinary Distribution per Unit, provided that the Ordinary Distribution and the Cash Distribution shall have the same ex-entitlement date. For the avoidance of doubt, the OD shall be deemed to be zero if the ex-entitlement dates of the relevant Ordinary Distribution and Cash Distribution are different

In addition, the Issuer shall adjust the Strike Price and the Call Price (which shall be rounded to the nearest 0.001) by the reciprocal of the Adjustment Factor, where the reciprocal of the Adjustment Factor means one divided by the relevant Adjustment Factor. The adjustment to the Strike Price and the Call Price shall take effect on the Cash Distribution Adjustment Date.

3.6 *Other Adjustments*

Without prejudice to and notwithstanding any prior adjustment(s) made pursuant to the applicable Product Conditions, the Issuer may (but shall not be obliged to) make such other adjustments to the terms and conditions of the CBBCs as appropriate where any event (including the events as contemplated in the applicable Product Conditions) occurs and irrespective of, in substitution for, or in addition to the provisions contemplated in the applicable Product Conditions, provided that such adjustment is:

(a) not materially prejudicial to the interests of the Holders generally (without considering the circumstances of any individual Holder or the tax or other consequences of such adjustment in any particular jurisdiction); or

(b) determined by the Issuer in good faith to be appropriate and commercially reasonable.

3.7 *Notice of Determinations*

All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Holder. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment or amendment and of the date from which such adjustment or amendment is effective by publication in accordance with General Condition 8.

4. Termination or liquidation

4.1 In the event of a Termination, liquidation or dissolution of the Fund or, if applicable, the trustee of the Fund (including any successor trustee appointed from time to time) ("**Trustee**") (in its capacity as trustee of the Fund) or the appointment of a liquidator, receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of the Fund's or the Trustee's (as the case may be) undertaking, property or assets, all unexercised CBBCs will lapse and shall cease to be valid for any purpose. In the case of a Termination, the unexercised CBBCs will lapse and shall cease to be valid on the effective date of the Termination, in the case of a voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator or receiver or administrator or analogous person under any applicable law in respect of the whole or substantially the whole of such Fund's or the Trustee's (as the case may be) undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory requirement of the Applicable Law.

4.2 For the purposes of this Product Condition 4, "**Termination**" means (a) the Fund is terminated or required to be terminated for whatever reason, or the termination of the Fund commences; (b) the Fund is held or is conceded by the Trustee (where applicable) or the manager of the Fund (including any successor manager appointed from time to time) not to have been constituted or to have been imperfectly constituted; (c) where applicable, the Trustee ceases to be authorized under the Fund to hold the property of the Fund in its name and perform its obligation under the trust deed constituting the Fund; or (d) the Fund ceases to be authorized as an authorized collective investment scheme under the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong).

5. Delisting

5.1 If at any time the Units cease to be listed on the Stock Exchange, the Issuer shall give effect to the General Conditions and these Product Conditions in such manner and make such adjustments and amendments to the rights attaching to the CBBCs as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Holder generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of the Holder or the tax or other consequences that may result in any particular jurisdiction).

5.2 Without prejudice to the generality of Product Condition 5.1, where the Units are, or, upon the delisting, become, listed on any other stock exchange, the Conditions may, in the absolute discretion of the Issuer, be amended to the extent necessary to allow for the substitution of that other stock exchange in place of the Stock Exchange and the Issuer may, without the consent of the Holder, make such adjustments to the entitlements of the Holder on exercise (including, if appropriate, by converting foreign currency amounts at prevailing market rates into the relevant currency) as may be appropriate in the circumstances.

5.3 The Issuer shall determine, in its absolute discretion, any adjustment or amendment and its determination shall be conclusive and binding on the Holder save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Holder in accordance with General Condition 8 as soon as practicable after they are determined.

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APPENDIX 4 — A BRIEF GUIDE TO CREDIT RATINGS

Information set out in this Appendix 4 is based on, extracted or reproduced from the website of S&P at https://www.spglobal.com/ratings/en/ and the website of Moody's at https://www.moodys.com, as of the day immediately preceding the date of this document. Information appearing on those websites does not form part of this document, and we accept no responsibility for the accuracy or completeness of the information appearing on those websites, except that we have accurately extracted and reproduced such information in this Appendix 4 and take responsibility for such extraction and reproduction. We have not separately verified such information. There can be no assurance that such information will not be revised by the relevant rating agency in the future and we have no responsibility to notify you of such change. If you are unsure about any information provided in this Appendix 4 and/or what a credit rating means, you should seek independent professional advice.

What is a credit rating?

A credit rating is a forward looking opinion by a credit rating agency of a company's overall ability to meet its financial obligations. The focus is on the company's capacity to pay its debts as they become due. The rating does not necessarily apply to any specific obligation.

What do the credit ratings mean?

Below are guidelines issued by S&P and Moody's on what each of their investment-grade ratings means, as of the day immediately preceding the date of this document.

S&P long-term issuer credit ratings

AAA
An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by S&P.

AA
An obligor rated 'AA' has very strong capacity to meet its financial commitments.

A
An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat susceptible to economic conditions and changes in circumstances.

BBB
An obligor rated 'BBB' has adequate capacity to meet its financial commitments, but is more subject to adverse economic conditions.

Plus (+) or minus (-)
The above ratings (except for 'AAA') may be modified by the addition of a plus or minus sign to show relative standing within the rating categories.

Please refer to https://www.spglobal.com/ratings/en/about/intro-to-credit-ratings for further details.

Moody's long-term ratings definitions

Aaa
Obligations rated Aaa are judged to be of the highest quality, with minimal risk.

Aa
Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A
Obligations rated A are considered upper-medium-grade and are subject to low credit risk.

Baa

Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess speculative characteristics.

Modifiers “1”, “2” and “3”
Moody’s appends numerical modifiers 1, 2 and 3 to each of the above generic rating classifications (except for Aaa). The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

Please refer to https://ratings.moodys.io/ratings for further details.

Rating Outlooks

A rating outlook is an opinion regarding the likely rating direction over the medium term (for example, this is typically six to twenty-four months for S&P). A rating outlook issued by S&P or Moody’s will usually indicate whether the rating direction is likely to be “positive”, “negative”, “stable” or “developing”. Please refer to the abovementioned websites of the relevant credit rating agencies for further details regarding rating outlooks published by the relevant credit rating agencies.

APPENDIX 5 — OUR ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2023 AND INDEPENDENT AUDIT REPORT EXTRACTED FROM THE 2023 ANNUAL REPORT

Our annual financial statements for the year ended 31 March 2023 and independent audit report set out in this Appendix 5 are extracted from the 2023 Annual Report. Unless otherwise stated, these financial statements have been prepared in accordance with our usual accounting policies and procedures.

References to page numbers in this Appendix 5 are to the pages in our annual financial statements for the year ended 31 March 2023 and independent audit report extracted from the 2023 Annual Report.

Please refer to the base listing document dated 30 May 2022 for our annual financial statements and independent audit report in 2022.

The financial statements of Macquarie Bank for the year ended 31 March 2023 included in this Base Listing Document have been audited by PricewaterhouseCoopers, Chartered Accountants, as stated in its opinion appearing therein. The audit opinion of PricewaterhouseCoopers for these financial statements was provided to the addressees of the report at the date of its issue and is subject to the disclaimers and qualifications contained therein. To the extent permitted by law, PricewaterhouseCoopers expressly disclaims and accepts no responsibility to any party other than the addressees of such report at the date of its issue.

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The Financial Report was authorised for issue by the Board of Directors on 5 May 2023.

The Board of Directors has the power to amend and reissue the Financial Report.

Income statements

For the financial year ended 31 March 2023

		CONSOLIDATED		COMPANY	
	Notes	**2023 $m**	2022 $m	**2023 $m**	2022 $m
Interest and similar income:					
Effective interest rate method	2	**7,542**	3,369	**7,555**	3,062
Other	2	**697**	105	**661**	79
Interest and similar expense	2	**(5,599)**	(1,021)	**(5,819)**	(1,122)
Net interest income		**2,640**	2,453	**2,397**	2,019
Net trading income	2	**7,308**	4,214	**3,507**	2,068
Fee and commission income	2	**2,396**	1,954	**970**	724
Net credit impairment charges	2	**(116)**	(16)	**(122)**	(223)
Net other impairment reversals/(charges)	2	**2**	(11)	**(41)**	11
Net other operating income	2	**561**	960	**2,324**	4,819
Net operating income		**12,791**	9,554	**9,035**	9,418
Employment expenses	2	**(4,758)**	(3,696)	**(1,408)**	(1,205)
Brokerage, commission and fee expenses	2	**(520)**	(505)	**(431)**	(433)
Non-salary technology expenses	2	**(890)**	(716)	**(173)**	(152)
Other operating expenses	2	**(1,212)**	(970)	**(2,685)**	(2,038)
Total operating expenses		**(7,380)**	(5,887)	**(4,697)**	(3,828)
Operating profit before income tax		**5,411**	3,667	**4,338**	5,590
Income tax expense	4	**(1,506)**	(950)	**(581)**	(487)
Profit after income tax		**3,905**	2,717	**3,757**	5,103
Profit attributable to the ordinary equity holder of Macquarie Bank Limited		**3,905**	2,717	**3,757**	5,103

The above income statements should be read in conjunction with the accompanying notes.

Statements of comprehensive income

For the financial year ended 31 March 2023

	Notes	CONSOLIDATED 2023 $m	CONSOLIDATED 2022 $m	COMPANY 2023 $m	COMPANY 2022 $m
Profit after income tax		**3,905**	2,717	**3,757**	5,103
Other comprehensive income/(loss):[1]					
Movements in items that may be subsequently reclassified to the income statement:					
Fair value through other comprehensive income (FVOCI) reserve:					
Revaluation movement	25	**(6)**	(28)	**(43)**	(16)
Changes in expected credit losses (ECL) allowance	25	**2**	(3)	**(3)**	1
Cash flow hedges and cost of hedging reserve:					
Revaluation movement		**32**	69	**62**	69
Transferred to income statement on realisation		**33**	44	**16**	(27)
Foreign exchange movement on translation and hedge accounting of foreign operations		**562**	41	**551**	(181)
Other reserves	25	**2**	3	**–**	–
Movements in item that will not be subsequently reclassified to the income statement:					
Fair value changes attributable to own credit risk on debt designated at fair value through profit or loss (DFVTPL)		**1**	12	**2**	12
Others		**3**	–	**2**	–
Total other comprehensive income/(loss)		**629**	138	**587**	(142)
Total comprehensive income attributable to the ordinary equity holder of Macquarie Bank Limited		**4,534**	2,855	**4,344**	4,961

The above statements of comprehensive income should be read in conjunction with the accompanying notes.

(1) All items are net of tax, where applicable.

Statements of financial position

As at 31 March 2023

		CONSOLIDATED		COMPANY	
	Notes	**2023 $m**	2022 $m	**2023 $m**	2022 $m
Assets					
Cash and bank balances		**41,612**	48,972	**36,176**	43,594
Cash collateralised lending and reverse repurchase agreements		**43,201**	42,548	**42,844**	38,205
Trading assets	6	**15,792**	11,719	**14,457**	10,131
Margin money and settlement assets	7	**19,375**	19,410	**14,518**	13,815
Derivative assets	8	**35,820**	84,616	**27,175**	74,444
Financial investments	9	**16,899**	6,511	**14,719**	6,477
Held for sale and other assets	10	**6,278**	4,990	**4,152**	2,941
Loan assets	11	**141,760**	123,004	**140,085**	121,179
Due from subsidiaries	27	**–**	–	**18,314**	23,956
Due from related body corporate entities	27	**4,421**	3,425	**3,887**	2,954
Property, plant and equipment and right-of-use assets	13	**4,577**	3,536	**3,428**	2,801
Investments in subsidiaries	14	**–**	–	**4,774**	6,287
Deferred tax assets	15	**1,088**	897	**672**	402
Total assets		**330,823**	349,628	**325,201**	347,186
Liabilities					
Cash collateralised borrowing and repurchase agreements		**18,737**	16,947	**17,928**	16,947
Trading liabilities	16	**4,754**	5,206	**4,757**	5,210
Margin money and settlement liabilities	17	**21,913**	21,577	**17,364**	15,593
Derivative liabilities	18	**32,522**	84,191	**27,421**	71,521
Deposits	19	**134,648**	101,614	**133,661**	101,417
Other liabilities	20	**7,627**	5,744	**3,963**	3,022
Borrowings		**8,103**	5,713	**2,429**	2,787
Due to subsidiaries	27	**–**	–	**28,716**	36,572
Due to related body corporate entities	27	**14,642**	11,637	**12,374**	10,203
Issued debt securities	21	**57,979**	72,107	**46,581**	58,722
Deferred tax liabilities	15	**23**	28	**25**	29
Total liabilities excluding loan capital		**300,948**	324,764	**295,219**	322,023
Loan capital	23	**9,523**	6,896	**9,523**	6,896
Total liabilities		**310,471**	331,660	**304,742**	328,919
Net assets		**20,352**	17,968	**20,459**	18,267
Equity					
Contributed equity	24	**10,161**	9,562	**10,013**	9,416
Reserves	25	**1,057**	432	**419**	(164)
Retained earnings	25	**9,134**	7,974	**10,027**	9,015
Total capital and reserves attributable to the ordinary equity holder of Macquarie Bank Limited		**20,352**	17,968	**20,459**	18,267
Total equity		**20,352**	17,968	**20,459**	18,267

The above statements of financial position should be read in conjunction with the accompanying notes.

Statements of changes in equity

For the financial year ended 31 March 2023

	Notes	Contributed equity $m	Reserves $m	Retained earnings $m	Total equity $m
					CONSOLIDATED
Balance as at 1 Apr 2021		8,523	306	5,245	14,074
Profit after income tax		–	–	2,717	2,717
Other comprehensive income, net of tax		–	126	12	138
Total comprehensive income		–	126	2,729	2,855
Contribution of ordinary equity by the equity holder	24	1,000	–	–	1,000
Other equity movements	24	39	–	–	39
		1,039	–	–	1,039
Balance as at 31 Mar 2022		9,562	432	7,974	17,968
Profit after income tax		**–**	**–**	**3,905**	**3,905**
Other comprehensive income, net of tax		**–**	**625**	**4**	**629**
Total comprehensive income		**–**	**625**	**3,909**	**4,534**
Dividends paid	5	**–**	**–**	**(2,749)**	**(2,749)**
Contribution of ordinary equity by the equity holder	24	**600**	**–**	**–**	**600**
Other equity movements	24	**(1)**	**–**	**–**	**(1)**
		599	**–**	**(2,749)**	**(2,150)**
Balance as at 31 Mar 2023		**10,161**	**1,057**	**9,134**	**20,352**
					COMPANY
Balance as at 1 Apr 2021		8,400	(10)	3,924	12,314
Profit after income tax		–	–	5,103	5,103
Other comprehensive (loss)/income, net of tax		–	(154)	12	(142)
Total comprehensive (loss)/income		–	(154)	5,115	4,961
Contribution of ordinary equity by the equity holder	24	1,000	–	–	1,000
Change attributable to group restructure	25	–	–	(24)	(24)
Other equity movements	24	16	–	–	16
		1,016	–	(24)	992
Balance as at 31 Mar 2022		9,416	(164)	9,015	18,267
Profit after income tax		**–**	**–**	**3,757**	**3,757**
Other comprehensive income, net of tax		**–**	**583**	**4**	**587**
Total comprehensive income		**–**	**583**	**3,761**	**4,344**
Dividends paid	5	**–**	**–**	**(2,749)**	**(2,749)**
Contribution of ordinary equity by the equity holder	24	**600**	**–**	**–**	**600**
Other equity movements	24	**(3)**	**–**	**–**	**(3)**
		597	**–**	**(2,749)**	**(2,152)**
Balance as at 31 Mar 2023		**10,013**	**419**	**10,027**	**20,459**

The above statements of changes in equity should be read in conjunction with the accompanying notes.

Statements of cash flows

For the financial year ended 31 March 2023

	Notes	CONSOLIDATED 2023 $m	CONSOLIDATED 2022 $m	COMPANY 2023 $m	COMPANY 2022 $m
Cash flows (utilised in)/generated from operating activities					
Interest income and expense:					
Received		**7,988**	3,466	**7,986**	3,109
Paid		**(4,934)**	(1,031)	**(5,181)**	(1,152)
Fees, commissions and other income and charges:					
Received		**2,565**	1,934	**1,313**	635
Paid		**(558)**	(471)	**(481)**	(399)
Operating lease income received		**731**	841	**512**	422
Dividends and distributions received		**3**	13	**1,886**	3,259
Operating expenses paid:					
Employment expenses		**(4,357)**	(3,303)	**(1,309)**	(1,058)
Other operating expenses including brokerage, commission and fee expenses		**(1,848)**	(1,078)	**(2,396)**	(1,969)
Income tax paid		**(1,070)**	(395)	**(147)**	(57)
Changes in operating assets:					
Loan assets, receivables and balances with related entities		**(16,832)**	(29,716)	**(19,824)**	(26,763)
Assets under operating lease		**(867)**	(1,115)	**(534)**	(2,059)
Other assets		**(436)**	(1,568)	**(66)**	(1,190)
Trading and related assets, liquid investments and collateralised lending balances (net of liabilities)		**(9,362)**	14,089	**(9,026)**	6,882
Changes in operating liabilities:					
Issued debt securities		**(19,247)**	27,369	**(17,512)**	24,182
Deposits		**32,962**	17,472	**31,772**	17,415
Borrowings and other funding		**1,771**	13,330	**(597)**	10,823
Other liabilities		**19**	(298)	**(8)**	(10)
Net cash flows (utilised in)/generated from operating activities	26	**(13,472)**	39,539	**(13,612)**	32,070
Cash flows utilised in investing activities					
Net (payments for)/proceeds from financial investments		**(1,074)**	2,688	**(520)**	2,606
Associates, joint ventures, subsidiaries and businesses:					
Proceeds from disposal or capital return, net of cash deconsolidated		**4**	534	**2,368**	5,241
Payments for acquisitions of or additional capital contribution, net of cash acquired		**(45)**	(51)	**(535)**	(3,625)
Property, plant and equipment and intangible assets:					
Payments for acquisition		**(403)**	(164)	**(305)**	(131)
Proceeds from disposal		**25**	–	**–**	–
Net cash flows (utilised in)/generated from investing activities		**(1,493)**	3,007	**1,008**	4,091
Cash flows generated from/(utilised in) financing activities					
Loan capital:					
Issuance		**2,338**	1,405	**2,338**	1,405
Redemption		**–**	(1,101)	**–**	(1,101)
Dividends and distributions paid		**(2,749)**	–	**(2,749)**	–
Issuance of ordinary shares		**600**	1,000	**600**	1,000
Net cash flows generated from financing activities		**189**	1,304	**189**	1,304
Net increase/(decrease) in cash and cash equivalents		**(14,776)**	43,850	**(12,415)**	37,465
Cash and cash equivalents at the beginning of the financial year	26	**72,361**	29,318	**64,678**	27,649
Effect of exchange rate movement on cash and cash equivalents		**3,597**	(807)	**4,300**	(436)
Cash and cash equivalents at the end of the financial year	26	**61,182**	72,361	**56,563**	64,678

The above statements of cash flows should be read in conjunction with the accompanying notes.

Notes to the financial statements

For the financial year ended 31 March 2023

Note 1
Basis of preparation

This Financial Report is a General Purpose Financial Report which has been prepared in accordance with Australian Accounting Standards and the *Corporations Act 2001* (Cth). Macquarie Bank Limited is a for-profit company for the purposes of preparing this Financial Report.

The principal accounting policies adopted in the preparation of this Financial Report are set out in Note 41 *Significant accounting policies.* These policies have been consistently applied to all the financial years presented and are applicable to both the Consolidated Entity (Macquarie Bank Limited and its subsidiaries) as well as the Company (Macquarie Bank Limited), unless otherwise stated.

(i) Compliance with IFRS as issued by the IASB

Compliance with Australian Accounting Standards ensures that this Financial Report complies with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Consequently, this Financial Report is compliant with IFRS.

(ii) Basis of measurement

This Financial Report has been prepared under the historical cost convention except for the following items, as disclosed in the respective accounting policy:

- financial instruments (including derivatives) required to be measured at fair value through profit or loss (FVTPL); financial assets classified as fair value through other comprehensive income (FVOCI) and financial instruments that have been designated as FVTPL (DFVTPL)
- financial assets and liabilities that are otherwise measured on an amortised cost basis but adjusted for changes in fair value attributable to the risk being hedged in qualifying fair value hedge relationships
- non-current assets and disposal groups that have been classified as held for sale and where a disposal group has been impaired to its fair value less costs to sell
- commodity inventories that are measured at fair value less costs to sell in accordance with the broker-trader exemption.

(iii) Critical accounting estimates and significant judgements

The preparation of this Financial Report in compliance with Australian Accounting Standards requires the use of certain critical accounting estimates. It also requires management to exercise judgement in the process of applying the accounting policies. The notes to the financial statements set out areas involving a higher degree of judgement or complexity, or areas where assumptions are significant to the consolidated Financial Report such as:

- determining the appropriate business model for a group of financial assets which includes determining the level at which the business model condition is applied and whether past or expected sales activity is consistent with a held to collect business model Note 41(vii)
- assessing whether the cash flows generated by a financial asset constitute solely payments of principal and interest (SPPI) may require the application of judgement, particularly for certain subordinated or non-recourse positions, and in the determination of whether compensation for early termination of a contract is reasonable (Note 41(vii))
- choice of inputs, estimates and assumptions used in the measurement of Expected Credit Loss, including the determination of significant increase in credit risk (SICR), forecasts of economic conditions and the weightings assigned thereto (Note 41(xxii) and Note 12)
- timing and amount of impairment of interests in associates and joint ventures and investment in subsidiaries, including the reversal thereof (Note 41(i), Note 41(xxii) and Note 14)
- fair value of assets and liabilities including the determination of non-recurring fair values and accounting for day 1 profits or losses for financial instruments (Note 41(vii), Note 41(x) and Note 35)
- determination of significant influence over associates, joint control over arrangements and control over subsidiaries, including the assessment of whether certain rights are protective or substantive in nature, whether these rights are held in the capacity as agent or principal, and whether the level of involvement in an investee's relevant activities is sufficient to significantly affect the returns generated (Note 41(i))
- recoverability of tax receivables, deferred tax assets and measurement of current and deferred tax liabilities can require significant judgement, particularly where the recoverability of such tax balances relies on the estimation of future taxable profits and management's determination of the likelihood that uncertain tax positions will be accepted by the relevant taxation authority (Note 41(vi), Note 4 and Note 15)
- recognition and measurement of provisions related to actual and potential claims and the determination of contingent liabilities (Note 41(xvii) and Note 30)
- application of hedge accounting principles, including the assessment that a forecast transaction is highly probable (Note 41(x) and Note 32).

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including reasonable expectations of future events.

Management believes that the estimates used in preparing this Financial Report are reasonable. Actual results in the future may differ from those reported and it is therefore reasonably possible, on the basis of existing knowledge, that outcomes within the next financial year that are different from management's assumptions and estimates could require an adjustment to the carrying amounts of the reported assets and liabilities in future reporting periods.

Note 1
Basis of preparation continued

(iv) New Australian Accounting Standards and amendments to Australian Accounting Standards and interpretations that are either effective in the current financial year or have been early adopted

The amendments made to existing standards that were mandatorily effective or have been early adopted for the annual reporting period beginning on 1 April 2022 did not result in a material impact on this Financial Report. There were no new Australian Accounting Standards that were mandatorily effective or have been early adopted for this Financial Report.

(v) Other developments

IBOR reform: Transition from inter-bank offered rates (IBOR) to alternative reference rates (ARRs)

IBOR interest rate benchmarks, that are used in a wide variety of financial instruments such as derivatives and lending arrangements, are undergoing reforms. Examples of IBOR include the London Inter-bank Offered Rate (LIBOR), the Euro Inter-bank Offered Rate (EURIBOR), the Canadian Dollar Offered Rate (CDOR) and the Australian Bank Bill Swap Rate (BBSW). The nature of the reforms varies across different jurisdictions. For example, in Australia the existing IBOR benchmark (BBSW) has undergone reform and is expected to continue for the foreseeable future alongside the nominated ARR for AUD which is AUD Overnight Index Average (AONIA).

IBOR including the GBP, JPY, EUR and CHF London Inter-bank Offered Rate (LIBOR), and the 1-week and 2-month tenors for USD LIBOR ceased publication on 31 December 2021. The remaining USD LIBOR tenors and some IBOR's for minor currencies, other than CDOR will cease publication on 30 June 2023. CDOR will cease publication on 28 June 2024.

Industry working groups have worked with authorities and consulted with market participants to develop market practices that may be used to transition existing LIBOR-linked contracts for derivatives, loans, bonds and other financial instruments that mature beyond their respective LIBOR cessation dates, to ARRs. Amongst the issues considered were the key differences between LIBOR and ARRs. LIBOR are term rates which are quoted at the beginning of that period (for example, one-, three-, six-or twelve-month periods) and include a component of bank credit risk. ARRs on the other hand are overnight rates with little or no credit risk. To facilitate the transition of contracts from LIBOR to ARRs on an economically equivalent basis, adjustments for term and credit differences needs to be applied.

As a diversified financial services group with a variety of global products and services, IBOR reforms, including the transition from LIBOR to ARRs, are important changes for the Consolidated Entity.

Impacts on financial reporting

AASB 2019-3 *Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform* amended AASB 7 *Financial Instruments: Disclosures* (AASB 7) and AASB 9 *Financial Instruments* (AASB 9) to provide certain relief from applying specific accounting requirements to hedge accounting relationships directly affected by IBOR reform. The relief enables the continuation of hedge accounting for impacted hedge relationships during the period of uncertainty prior to IBOR transition. The Consolidated Entity early adopted these amendments for the year ended 31 March 2020.

In August 2020, AASB 2020-8 *Amendments to Australian Accounting Standards – Interest Rate Benchmark Reform – Phase 2* amended standards including AASB 7, AASB 9 and AASB 16 *Leases* (AASB 16) to address accounting issues following the transition to ARR. The amendments require additional quantitative and qualitative disclosures, and provide certain reliefs from applying specific requirements related to hedge accounting and the modification of financial instruments if certain criteria are met.

Where modifications to a contract, or changes in the basis for determining the contractual cash flows under a contract, are necessitated as a direct consequence of IBOR reform and the new basis for determining the contractual cash flows is economically equivalent to the previous basis, the relief allows an entity to reset the yield applied to such an exposure on a prospective basis. Thus, at the time of modification, where the relief applies, there is no impact to the income statement. The relief requires continuation of hedge accounting in circumstances when changes to hedged items and hedging instruments arise as a result of changes required by the IBOR reform.

The Consolidated Entity early adopted the amendments for the year ended 31 March 2021.

Note 2
Operating profit before income tax

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Net interest income				
Interest and similar income:				
Effective interest rate method - Amortised Cost	**6,975**	3,316	**6,890**	2,845
Effective interest rate method - FVOCI	**567**	53	**665**	217
Other	**697**	105	**661**	79
Interest and similar expense:				
Effective interest rate method - Amortised Cost	**(5,564)**	(963)	**(5,783)**	(1,072)
Other	**(35)**	(58)	**(36)**	(50)
Net interest income	**2,640**	2,453	**2,397**	2,019
Net trading income[(1)]				
Commodities trading[(2)]	**6,075**	3,233	**2,372**	1,307
Credit, interest rate, foreign exchange and other products	**803**	645	**856**	656
Equities	**430**	336	**279**	105
Net trading income	**7,308**	4,214	**3,507**	2,068
Fee and commission income				
Service fee from related parties	**1,312**	1,006	**144**	132
Brokerage and other trading-related fees	**285**	275	**196**	171
Portfolio administration fees	**292**	247	**67**	69
Lending fees	**143**	133	**280**	117
Other fee and commission income	**364**	293	**283**	235
Total fee and commission income	**2,396**	1,954	**970**	724

(1) Includes fair value movements on trading assets and liabilities, ineffective portion of designated hedge relationships, fair value changes on derivatives used to economically hedge the Consolidated Entity's interest rate risk and foreign currency gains and losses on foreign currency-denominated monetary assets and liabilities. Refer to Note 41(x) *Derivative instruments and hedging activities.*
(2) Includes $529 million (2022: $409 million) in the Consolidated Entity and $38 million (2022: $79 million) in the Company for transportation, storage and certain other trading related costs and $11 million (2022: $10 million) in the Consolidated Entity for depreciation on right-of-use (ROU) assets held for trading-related business.

Note 2
Operating profit before income tax continued

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Credit and other impairment (charges)/reversals				
Credit impairment (charges)/reversals				
Loan assets	**(100)**	77	**(100)**	(147)
Margin money and settlement assets	**33**	(28)	**21**	(39)
Financial investments, other assets, off balance sheet exposures	**(52)**	(67)	**(47)**	(46)
Gross credit impairment charges	**(119)**	(18)	**(126)**	(232)
Recovery of amounts previously written off	**3**	2	**4**	9
Net credit impairment charges	**(116)**	(16)	**(122)**	(223)
Other impairment reversals/(charges)				
Intangible and other non-financial assets	**2**	(11)	**(7)**	(10)
Investments in subsidiaries	**–**	–	**(34)**	21
Net other impairment reversals/(charges)	**2**	(11)	**(41)**	11
Total credit and other impairment charges	**(114)**	(27)	**(163)**	(212)
Net other operating income				
Investment income				
Net gain from:				
Disposal of businesses and subsidiaries[1]	**–**	460	**31**	1,403
Interest in associates and joint ventures, financial investments and other assets	**47**	61	**25**	64
Dividends from subsidiaries[1]	**–**	–	**1,883**	3,259
Total investment income	**47**	521	**1,939**	4,726
Net operating lease income				
Rental income	**724**	656	**519**	262
Depreciation	**(346)**	(317)	**(230)**	(109)
Net operating lease income	**378**	339	**289**	153
Share of net profits from associates and joint ventures	**26**	39	**–**	–
Other income/(charges)	**110**	61	**96**	(60)
Total net other operating income	**561**	960	**2,324**	4,819
Net operating income	**12,791**	9,554	**9,035**	9,418

(1) Balance under Company includes gains on disposal of certain subsidiaries and dividend received from subsidiaries as part of common control business combination transaction during the previous year. For details, refer to Note 27 *Related party information*.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 2
Operating profit before income tax continued

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Employment expenses				
Salary and related costs including commissions, superannuation and performance-related profit share	**(4,015)**	(3,099)	**(1,154)**	(984)
Share-based payments	**(417)**	(324)	**(152)**	(121)
Provision for long service leave and annual leave	**(46)**	(57)	**(13)**	(19)
Total compensation expenses	**(4,478)**	(3,480)	**(1,319)**	(1,124)
Other employment expenses including on-costs, staff procurement and staff training	**(280)**	(216)	**(89)**	(81)
Total employment expenses	**(4,758)**	(3,696)	**(1,408)**	(1,205)
Brokerage, commission and fee expenses				
Brokerage and other trading-related fee expenses	**(445)**	(397)	**(290)**	(275)
Other fee and commission expenses	**(75)**	(108)	**(141)**	(158)
Total brokerage, commission and fee expenses	**(520)**	(505)	**(431)**	(433)
Non-salary technology expenses				
Information services	**(127)**	(107)	**(58)**	(48)
Depreciation on own use assets: equipment (Note 13)	**(19)**	(18)	**(3)**	(3)
Service provider and other non-salary technology expenses	**(744)**	(591)	**(112)**	(101)
Total non-salary technology expenses	**(890)**	(716)	**(173)**	(152)
Other operating expenses				
Occupancy expenses				
Lease and other occupancy expenses	**(233)**	(163)	**(74)**	(74)
Depreciation on own use assets: buildings, furniture, fittings and leasehold improvements (Note 13)	**(35)**	(38)	**(2)**	(2)
Total occupancy expenses	**(268)**	(201)	**(76)**	(76)
Other expenses				
Service cost recoveries by related parties	**-**	-	**(2,148)**	(1,506)
Professional fees	**(265)**	(223)	**(121)**	(111)
Indirect and other taxes	**(96)**	(115)	**(52)**	(85)
Travel and entertainment expenses	**(77)**	(16)	**(23)**	(6)
Advertising and promotional expenses	**(59)**	(45)	**(52)**	(42)
Fees for audit and other services	**(51)**	(29)	**(40)**	(17)
Amortisation of intangible assets	**(11)**	(23)	**(11)**	(20)
Other	**(385)**	(318)	**(162)**	(175)
Total other expenses	**(944)**	(769)	**(2,609)**	(1,962)
Total other operating expenses	**(1,212)**	(970)	**(2,685)**	(2,038)
Total operating expenses	**(7,380)**	(5,887)	**(4,697)**	(3,828)
Operating profit before income tax	**5,411**	3,667	**4,338**	5,590

Note 3
Segment reporting

(i) Operating Segments

AASB 8 *Operating Segments* requires the 'management approach' to disclosing information about the Consolidated Entity's reportable segments. The financial information is reported on the same basis as used internally by Senior Management for evaluating Operating Segment performance and for deciding how to allocate resources to Operating Segments. Such information may be produced using different measures to that used in preparing the statutory income statement.

For internal reporting, performance measurement and risk management purposes, the Consolidated Entity is divided into Operating Groups and a Corporate segment (reportable segments).

The financial information disclosed relates to the Consolidated Entity's ordinary activities.

These segments have been set up based on the different core products and services offered. The Operating Groups comprise:

- **BFS** which provides a diverse range of personal banking, wealth management, and business banking products and services to retail clients, advisers, brokers and business clients
- **CGM** which is a global business offering capital and financing, risk management, market access, physical execution and logistics solutions to its diverse client base across Commodities, Financial Markets and Asset Finance.

The Corporate segment, which is not considered an Operating Group, comprises head office and Central Service Groups, including Group Treasury, and holds certain legacy and strategic investments, assets and businesses that are not allocated to any of the Operating Groups. Any individually immaterial balance not attributable to an Operating Segment are also reported as part of the Corporate segment.

Items of income and expense within the Corporate segment include the net result of managing Macquarie Bank's liquidity and funding requirements, earnings on capital and the residual accounting volatility relating to economically hedged positions where hedge accounting is applied, as well as accounting volatility for other economically hedged positions where hedge accounting is not applicable.

Other items of income and expense within the Corporate segment include earnings from investments, changes in central overlays to impairments or valuation of assets, provisions for legacy matters, unallocated heads office costs and costs of Central Service Groups, the Consolidated Entity's performance-related profit share and share-based payments expense and income tax expense.

Below is a selection of key policies applied in determining the Operating Segment results.

Internal funding arrangements

Group Treasury has the responsibility for managing funding for the Consolidated Entity, and Operating Groups obtain the majority of their funding from Group Treasury. The interest rates charged by Group Treasury are determined by the currency and term of the funding. Break costs may be charged to Operating Groups for the early repayment of term funding.

Generally, Operating Groups may only source funding directly from external sources where the funding is secured by the Operating Group's assets. In such cases the Operating Group bears the funding costs directly and Group Treasury may levy additional charges where appropriate.

Deposits are a funding source for the Bank Group. The value of deposits that the Bank Group generates is recognised within Net interest and trading income for segment reporting purposes.

Transactions between Operating Segments

Operating Segments that enter into arrangements with other Operating Segments must do so on commercial terms or as agreed by the Consolidated Entity's Chief Executive Officer or Chief Financial Officer.

Internal transactions are recognised in each of the relevant categories of income and expense and eliminated on consolidation as appropriate.

Accounting for derivatives that economically hedge interest rate risk

With respect to businesses that predominantly earn income from lending activities, derivatives that hedge interest rate risk are measured at fair value through profit or loss (FVTPL). Changes in fair value are presented in net trading income and gives rise to income statement volatility unless designated in a hedge accounting relationship, in which case the carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk to reduce volatility in the income statement. If designated in a cash flow hedge accounting relationship, the effective portion of the derivative's fair value gains or losses is deferred in the cash flow hedge reserve as part of Other comprehensive income (OCI), and subsequently recognised in the income statement at the time at which the hedged item affects the income statement for the hedged risk. For segment reporting purposes, derivatives are accounted for on an accrual basis in the results of the Operating Groups to the extent that the Corporate segment manages the derivative volatility, either through the application of hedge accounting or where the derivative volatility may offset the volatility of other positions managed within the Corporate segment.

Note 3
Segment reporting continued

(i) Operating Segments continued

Central Service Groups

The Central Service Groups provide a range of functions supporting MGL's Operating Groups, ensuring they have the appropriate workplace support and systems to operate effectively and the necessary resources to meet their regulatory, compliance, financial, legal and risk management requirements.

Central Service Groups recover their costs from Operating Groups generally on either a time and effort allocation basis or a fee for service basis. Central Service Groups include the Corporate Operations Group (COG), Financial Management Group (FMG), Risk Management Group (RMG), Legal and Governance Group (LGG) and Central Executive.

Performance-related profit share and share-based payments expense

Performance-related profit share and share-based payments expense relating to the Macquarie Group Employee Retained Equity Plan (MEREP) are recognised in the Corporate segment and are not allocated to Operating Groups.

Income tax

Income tax expense and benefits are recognised in the Corporate segment and are not allocated to the Operating Groups. However, to recognise an Operating Group's contribution to permanent income tax differences, the internal management revenue/charge category is used.

This internal management revenue/charge category, which is primarily used for permanent income tax differences generated by the Operating Groups, are offset by an equal and opposite amount recognised in the Corporate segment such that they are eliminated on consolidation.

Presentation of segment income statements

The income statements on the following pages for each of the reported segments are in some cases summarised by grouping non-material balances together. Where appropriate, all material or key balances have been reported separately to provide users with information relevant to the understanding of the Consolidated Entity's financial performance. The financial information disclosed relates to the Consolidated Entity's ordinary activities.

Reportable segment assets

Segment assets are the external operating assets that are employed by a segment in its operating activities.

Note 3
Segment reporting continued

(i) Operating Segments continued

The following is an analysis of the Consolidated Entity's revenue and results by reportable segment.

	Banking and Financial Services $m	Commodities and Global Markets $m	Corporate $m	Total $m
				CONSOLIDATED 2023
Net interest and trading income	**2,520**	**7,203**	**225**	**9,948**
Fee and commission income	**504**	**595**	**1,297**	**2,396**
Other operating income and charges:				
Net credit and other impairment charges	**(34)**	**(53)**	**(27)**	**(114)**
Net other operating income and charges	**(20)**	**535**	**46**	**561**
Internal management (charge)/revenue	**(10)**	**28**	**(18)**	**-**
Net operating income	**2,960**	**8,308**	**1,523**	**12,791**
Total operating expenses	**(1,759)**	**(2,488)**	**(3,133)**	**(7,380)**
Operating profit/(loss) before income tax	**1,201**	**5,820**	**(1,610)**	**5,411**
Income tax expense	**-**	**-**	**(1,506)**	**(1,506)**
Net profit/(loss) contribution	**1,201**	**5,820**	**(3,116)**	**3,905**
Reportable segment assets	**129,049**	**141,925**	**59,847**	**330,821**
				CONSOLIDATED 2022
Net interest and trading income	1,972	4,633	62	6,667
Fee and commission income	457	486	1,011	1,954
Other operating income and charges:				
Net credit and other impairment reversals/(charges)	22	(66)	17	(27)
Net other operating income	9	942	9	960
Internal management revenue/(charges)	1	26	(27)	-
Net operating income	2,461	6,021	1,072	9,554
Total operating expenses	(1,460)	(2,089)	(2,338)	(5,887)
Operating profit/(loss) before income tax	1,001	3,932	(1,266)	3,667
Income tax expense	-	-	(950)	(950)
Net profit/(loss) contribution	1,001	3,932	(2,216)	2,717
Reportable segment assets	111,106	171,741	66,781	349,628

Note 3
Segment reporting continued

(ii) Fee and commission income relating to contracts with customers

The following is an analysis of the Consolidated Entity's fee and commission income by reportable segment.

	Banking and Financial Services $m	Commodities and Global Markets $m	Corporate $m	Total $m
				CONSOLIDATED 2023
Fee and commission income				
Service fee from related parties	**–**	**–**	**1,312**	**1,312**
Brokerage and other trading-related fee income	**39**	**246**	**–**	**285**
Portfolio administration fees	**290**	**2**	**–**	**292**
Lending fees	**140**	**3**	**–**	**143**
Other fee and commission income	**35**	**344**	**(15)**	**364**
Total fee and commission income	**504**	**595**	**1,297**	**2,396**
				CONSOLIDATED 2022
Fee and commission income				
Service fee from related parties	–	–	1,006	1,006
Brokerage and other trading-related fee income	45	230	–	275
Portfolio administration fees	245	2	–	247
Lending fees	121	12	–	133
Other fee and commission income	46	242	5	293
Total fee and commission income	457	486	1,011	1,954

(iii) Products and services

The Consolidated Entity's Operating Segments reflect different core products and services offered by the Group. Refer to Note 3(i) *Operating Segments* for net operating income contribution by various Operating Segments.

(iv) Geographical areas

Geographical segments have been determined based on the tax domicile of the entity where the transactions have been recorded. The operations of the Consolidated Entity are headquartered in Australia.

	CONSOLIDATED 2023		CONSOLIDATED 2022	
	Revenue from external customers[(1)] $m	**Non-current Assets[(2)] $m**	Revenue from external customers[(1)] $m	Non-current assets[(2)] $m
Australia	**9,115**	**1,312**	4,901	1,123
Americas[(3)]	**5,223**	**448**	2,900	329
Europe, Middle East and Africa[(4)]	**4,189**	**2,845**	2,703	2,358
Asia Pacific	**854**	**481**	835	218
Total	**19,381**	**5,086**	11,339	4,028

(v) Major customers

The Consolidated Entity does not rely on any major customers.

(1) Revenue from external customers includes operating income in the nature of fee and commission income, interest and similar income, net trading income, operating lease income, share of net profits/(losses) of associates and joint ventures, and gain on disposal of businesses, subsidiaries, associates and other financial/non-financial assets.
(2) Non-Current assets consist of intangible assets, interests in associates and joint ventures, property, plant and equipment and right-of-use assets and investment properties.
(3) Includes external revenue from the United States of $4,873 million (2022: $2,804 million).
(4) Includes external revenue from the United Kingdom of $3,784 million (2022: $2,442 million).

Note 4
Income tax expense

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
(i) Income tax (expense)/benefit				
Current tax expense	**(1,693)**	(982)	**(845)**	(329)
Deferred tax benefit/(expense)	**187**	32	**264**	(158)
Total income tax (expense)/benefit	**(1,506)**	(950)	**(581)**	(487)
(ii) Reconciliation of income tax expense to *prima facie* income tax expense				
Prima facie income tax expense on operating profit @30% (2022: 30%)	**(1,623)**	(1,100)	**(1,301)**	(1,677)
Tax effect of amounts which are non-assessable/(non-deductible) in calculating taxable income:				
Rate differential on offshore income	**146**	156	**216**	(162)
Intra-group dividends	**-**	-	**565**	978
Gain on internal restructures	**-**	-	**-**	415
Impairment (charge)/reversal on subsidiaries	**-**	-	**(10)**	6
Other items	**(29)**	(6)	**(51)**	(47)
Total income tax expense	**(1,506)**	(950)	**(581)**	(487)
(iii) Tax (expense)/benefit relating to OCI				
FVOCI reserve	**1**	12	**19**	17
Own credit risk	**(6)**	(5)	**(6)**	(5)
Cash flow hedges and cost of hedging	**1**	(11)	**-**	7
Foreign currency translation reserve	**-**	1	**-**	-
Share of other comprehensive benefit/(expense) of associates and joint ventures	**(1)**	-	**-**	-
Total tax (expense)/benefit relating to OCI	**(5)**	(3)	**13**	19
(iv) Deferred tax benefit/(expense) represents movements in deferred tax assets and liabilities				
Property, plant and equipment	**48**	3	**(6)**	(3)
Intangible assets	**(96)**	15	**35**	7
Financial investments and interests in associates and joint ventures	**(113)**	6	**-**	11
Tax losses	**101**	11	**11**	10
Operating and finance leases	**134**	1	**213**	(109)
Loan assets and derivatives	**2**	(5)	**(24)**	(103)
Other assets and liabilities	**111**	1	**35**	29
Total deferred tax benefit/(expense) represents movements in deferred tax assets and liabilities	**187**	32	**264**	(158)

Revenue authorities undertake risk reviews and audits as part of their normal activities. The Consolidated Entity has assessed these and other taxation claims and litigation, including seeking external advice where appropriate, and considers that it holds appropriate provisions.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 5
Dividends

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Dividends paid to parent entity (Macquarie B.H. Pty Limited)				
on 29 December 2022	**1,300**	–	**1,300**	–
on 30 March 2023	**1,449**	–	**1,449**	–
Total dividends paid (Note 25)	**2,749**	–	**2,749**	–

Note 6
Trading assets

Listed equity securities	**7,699**	4,733	**7,674**	4,679
Commodity contracts	**3,611**	3,261	**3,139**	2,971
Debt securities	**2,863**	606	**2,861**	605
Commodities	**1,619**	3,119	**783**	1,876
Total trading assets	**15,792**	11,719	**14,457**	10,131

The majority of the above amounts are expected to be materially recovered within 12 months of the balance date by the Consolidated Entity and the Company.

Note 7
Margin money and settlement assets

Margin money	**13,969**	14,087	**10,537**	9,910
Commodity settlements	**3,530**	4,294	**2,095**	2,926
Security settlements	**1,876**	1,029	**1,886**	979
Total margin money and settlement assets	**19,375**	19,410	**14,518**	13,815

The majority of the above amounts are expected to be materially recovered within 12 months of the balance date by the Consolidated Entity and the Company.

Note 8
Derivative assets

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Held for trading	**34,759**	84,171	**26,267**	74,028
Designated in hedge relationships	**1,061**	445	**908**	416
Total derivative assets	**35,820**	84,616	**27,175**	74,444

The above amounts under held for trading category are expected to be materially recovered within 12 months of the balance date by the Consolidated Entity and the Company.

Note 9
Financial investments

Equity securities:				
Listed	**65**	111	**62**	108
Unlisted	**200**	144	**147**	113
Debt securities:				
Liquid asset holdings	**14,040**	5,212	**12,511**	5,212
Bonds, money market and other securities	**2,594**	1,044	**1,999**	1,044
Total financial investments	**16,899**	6,511	**14,719**	6,477

Of the above amounts, $2,218 million (2022: $1,297 million) is expected to be recovered after 12 months of the balance date by the Consolidated Entity and $2,165 million (2022: $1,297 million) by the Company.

Note 10
Held for sale and other assets

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Held for sale assets				
Assets held for sale	**6**	3	**–**	–
Other financial assets				
Commodity-related receivables	**3,247**	2,508	**2,391**	1,647
Trade debtors and other receivables	**1,526**	1,148	**1,286**	771
Fee and commission receivables	**113**	175	**67**	141
Total other financial assets	**4,886**	3,831	**3,744**	2,559
Other non-financial assets				
Interests in associates and joint ventures	**412**	379	**120**	128
Income tax receivables	**305**	180	**84**	78
Prepayments	**283**	287	**58**	63
Indirect tax receivables	**201**	155	**126**	88
Intangible assets	**97**	101	**13**	23
Other	**88**	54	**7**	2
Total other non-financial assets	**1,386**	1,156	**408**	382
Total held for sale and other assets	**6,278**	4,990	**4,152**	2,941

Of the above other financial and non-financial asset amounts, $1,045 million (2022: $1,650 million) is expected to be recovered after 12 months of the balance date by the Consolidated Entity and $485 million (2022: $1,241 million) by the Company.

Note 11
Loan assets

	2023 Gross $m	2023 ECL allowance $m	2023 Net $m	2022 Gross $m	2022 ECL allowance $m	2022 Net $m
						CONSOLIDATED
Home loans	**114,483**	**(163)**	**114,320**	94,922	(76)	94,846
Corporate, commercial and other lending	**20,842**	**(306)**	**20,536**	18,590	(290)	18,300
Asset financing	**7,059**	**(155)**	**6,904**	10,082	(224)	9,858
Total loan assets	**142,384**	**(624)**	**141,760**	123,594	(590)	123,004
						COMPANY
Home loans	**114,483**	**(163)**	**114,320**	94,853	(75)	94,778
Corporate, commercial and other lending	**20,021**	**(266)**	**19,755**	18,214	(264)	17,950
Asset financing	**6,105**	**(95)**	**6,010**	8,591	(140)	8,451
Total loan assets	**140,609**	**(524)**	**140,085**	121,658	(479)	121,179

Of the above amounts, $92,421 million (2022: $89,978 million) is expected to be recovered after 12 months after the balance date by the Consolidated Entity and $92,424 million (2022: $88,976 million) by the Company.

Finance lease receivables

Finance lease receivables are included within loan assets. The Consolidated Entity provides finance leases to a broad range of clients to support financing needs in acquiring movable assets such as motor vehicles, small plant and equipment, electronic and IT equipment.

The following table represents the maturity profile of the contractual undiscounted cashflows of the Consolidated Entity and the Company.

	2023 Gross investment in finance lease receivables $m	2023 Unearned income $m	2023 Present value of minimum lease payments receivable $m	2022 Gross investment in finance lease receivables $m	2022 Unearned income $m	2022 Present value of minimum lease payments receivable $m
						CONSOLIDATED
Within one year	**920**	**(77)**	**843**	1,015	(66)	949
Between one to two years	**598**	**(54)**	**544**	752	(47)	705
Between two to three years	**388**	**(37)**	**351**	484	(31)	453
Between three to four years	**228**	**(23)**	**205**	273	(18)	255
Between four to five years	**181**	**(11)**	**170**	146	(8)	138
Later than five years	**22**	**(1)**	**21**	39	(1)	38
Total	**2,337**	**(203)**	**2,134**	2,709	(171)	2,538
						COMPANY
Within one year	**681**	**(48)**	**633**	685	(49)	636
Between one to two years	**453**	**(32)**	**421**	553	(38)	515
Between two to three years	**297**	**(22)**	**275**	402	(27)	375
Between three to four years	**161**	**(12)**	**149**	250	(17)	233
Between four to five years	**108**	**(7)**	**101**	122	(8)	114
Later than five years	**4**	**(1)**	**3**	16	(1)	15
Total	**1,704**	**(122)**	**1,582**	2,028	(140)	1,888

Note 12
Expected credit losses

The Consolidated Entity models the Expected Credit Losses (ECL) for on-balance sheet financial assets measured at amortised cost or FVOCI such as loans, debt securities and lease receivables, as well as off-balance sheet items such as undrawn loan commitments, certain financial guarantee contracts and letters of credit.

Model inputs

The Consolidated Entity segments its credit portfolio between retail and wholesale exposures, and further splits these portfolios into representative groupings which are typically based on shared risk characteristics.

The Consolidated Entity has developed several models to predict the ECL. These models incorporate a range of components notably that of Exposure at Default (EAD), Probability of Default (PD) and Loss Given Default (LGD) ('credit inputs') as well as Forward-Looking Information (FLI).

For retail portfolios, behavioural variables are also considered in the determination of inputs for ECL modelling.

The key model inputs used in measuring the ECL include:

- **Exposure at Default (EAD)**: The EAD represents the estimated exposure in the event of a default
- **Probability of Default (PD)**: The calculation of PDs for retail and wholesale exposures is generally performed at a facility level. Retail exposures are segmented based on product type and shared characteristics that are highly correlated to credit risk such as region, product, counterparty groupings, loan-to-value ratio and other similar criteria. Wholesale portfolio PDs are a function of industry type, internal credit ratings and transition matrices used to determine a point in time PD estimate. PD estimates for both retail and wholesale portfolios are also adjusted for FLI
- **Loss Given Default (LGD)**: The LGD associated with the PD used is the magnitude of the ECL in a default event. The LGD is estimated using historical loss rates considering relevant factors for individual exposures or portfolios.

Significant increase in credit risk (SICR)

The Consolidated Entity periodically assesses exposures to determine whether there has been a SICR, which may be evidenced by either qualitative or quantitative factors. Qualitative factors include, but are not limited to material change in internal credit rating or whether an exposure has been identified and placed on CreditWatch, an internal credit monitoring mechanism supervised by the credit watch management committee to closely monitor exposures showing signs of stress. All exposures on CreditWatch are classified as Stage II or, if defaulted, as Stage III.

SICR thresholds, which require judgement, are used to determine whether an exposure's credit risk has increased significantly. The SICR methodology is based on a relative credit risk approach which considers changes in an underlying exposure's credit risk since origination. This may result in exposures being classified in Stage II that are of a higher credit quality than other exposures that are classified as Stage I. Accordingly, while other similar increases in the quantum of Stage II exposures will suggest a relative deterioration of credit quality, it should not necessarily be inferred that the assets are of a lower credit quality.

Retail exposures

Exposures are assigned a behavioural score which considers the exposures' lifetime PD on initial recognition. This behavioural score is periodically assessed and updated to reflect changes in the underlying exposures' credit behaviour. SICR movement thresholds between origination and reporting date of behavioural score movements have been established that, where exceeded, result in the exposure being categorised as Stage II.

Wholesale exposures

The Consolidated Entity assigns an internal credit rating to each exposure at origination based on information available at that date. These internal ratings are broadly aligned to external credit rating agencies such as Standard & Poor's and Moody's.

Where an exposures' assigned credit rating deteriorates beyond pre-defined thresholds per credit rating at origination, the exposure is categorised as Stage II. The methodology has been calibrated so that a larger change in rating is required for higher quality credit rated exposures than for lower quality credit rated exposures to be classified as Stage II.

For both retail and wholesale portfolios:

- the AASB 9 'low credit risk' exemption is not applied by the Consolidated Entity to material portfolios
- for material retail portfolios, the credit risk for an exposure or portfolio is generally deemed to have increased significantly if the exposure is more than 30 days past due, unless there are product specific characteristics that indicate that this threshold should be rebutted.

Definition of default

The Consolidated Entity's definition of default determines the reference point for the calculation of the ECL components, and in particular the PD. Default is generally defined as the point when the borrower is unlikely to pay its credit obligations in full, without recourse by the Consolidated Entity to actions such as realisation of available security; or the borrower is 90 days or more past due on an obligation to the Consolidated Entity.

The Consolidated Entity periodically monitors its exposures for potential indicators of default such as significant financial difficulty of the borrower including breaches of lending covenants; it is probable that the borrower will enter bankruptcy or other financial reorganisation; the disappearance of an active market for that financial asset because of financial difficulties; or the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

Note 12
Expected credit losses continued

Forward-looking information (FLI)

The inclusion of FLI in calculating ECL allowances adjusts the PD, the determination of SICR in retail portfolio as well as the LGD (that is relevant to the determination of the recovery rates on collateral). The predicted relationships between these key indicators and the key model components (EAD, PD and LGD) in measuring the ECL have been developed by analysing historical data as part of the development of internal models, and the calibration and validation process.

The Consolidated Entity applies its professional judgement in determining whether there are any inherent risks in the models' predictive outcomes. The overlays primarily reflect management's assessment of the current economic and credit environment relative to the FLI credit cycle model. These overlays account for the risk that underlying credit risk events have occurred, but observable modelled inputs are yet to reflect those events, as well as risks that are specific to regions, counterparties or industries which are difficult to account for within the modelled outcomes. Over time the credit models are recalibrated to enhance the predictive capability. At the reporting date this overlay was approximately $225 million (2022: $275 million). These judgements are reviewed by FMG and RMG at each reporting date.

RMG is responsible for the FLI including the development of scenarios and recommending the range of probability weights to apply to those scenarios. For this purpose, four possible economic scenarios have been developed for this period, being an upside, downside, severe downside and baseline scenario. In calculating the ECL, each of the scenarios is probability weighted and then applied to the exposures' PDs and LGDs.

The scenarios have been developed using a combination of publicly available data, internal forecasts and third-party information to form the initial baseline. Internal specialists within the Consolidated Entity are consulted to assist in refining and challenging the baseline and the alternate scenarios. For the current reporting period, the Consolidated Entity has generated three alternate scenarios in addition to the baseline scenario, where the alternate scenarios are anchored on a relative basis.

Refinement of the scenarios includes benchmarking to external data from reputable sources. These sources include, forecasts published from a range of market economists and official data sources, including major central banks, where available.

Where there are limited official data sources against which to benchmark key economic indicators on a forward-looking basis, management exercises judgement when determining the duration, severity and impact of the macroeconomic scenarios used by the Consolidated Entity.

Assigning probabilities to these scenarios requires professional judgement. This judgement draws on internal risk and economics specialist input, comparison to general market outlooks and publicly available market commentary.

The scenarios and the associated probabilities are ultimately approved by senior risk and finance executives.

The scenarios for each of the key regions where the Consolidated Entity's ECL is derived have been set out on the following pages. Noting the diversity of possible scenarios and macroeconomic outcomes, and the continuing uncertainty regarding the implications of geo-political events, broader inflationary pressures and the path of monetary policy, these scenarios represent plausible forward-looking views as at the reporting date.

These scenarios impact the modelled ECL provisioning levels through determination of probabilities of default and determination of losses that may be incurred should a default occur. The ability of borrowers to service their obligations through personal or business income is generally estimated using unemployment rates, GDP, commodity prices and interest rates. The losses that the Consolidated Entity may incur should a default occur, and the collateral utilised is generally estimated through property price and share price index outlooks.

Future economic conditions may differ to the scenarios outlined, the impact of which will be accounted for in future reporting periods.

Note 12
Expected credit losses continued

Forward-looking information (FLI) continued

Scenario	Weighting	Expectation
Baseline A 100% weighting to this scenario would result in a total expected credit loss provision on balance sheet at the reporting date of ~$700 million[(1)]	Probable	**Global:** The baseline scenario assumes 2023 global GDP growth of around 2.01% year-on-year, slowing from 2.9% in 2022 in the face of inflationary pressures and tighter monetary policy. Interest rates are expected to peak in mid-2023, with rate cuts anticipated in 2024 as inflation eases and growth slows. **Australia:** Growth is expected to slow materially in 2023 to 1.9%, with unemployment increasing by 1 percentage point by Q2 2024, though baseline assumptions are for a recession to be avoided. Policy rate hikes from the Reserve Bank of Australia (RBA) are expected to stop in mid-2023. House prices fell ~8% during 2022 from their peak, and a further ~10% decline is anticipated in 2023 due to pressure on household budgets from high interest rates. Equity prices have been more resilient but are assumed to remain relatively constrained over the next 12-18 months. **United States:** Annual GDP growth is projected to slow in 2023, and contract late 2023 and early 2024 resulting in an overall peak-to-trough fall in GDP of 1.6% over 12 months. As a result, the unemployment rate is projected to increase by 2 percentage points to 5.5% by the end of 2024, with rate cuts to provide support to the economy in early 2024. **Europe:** The Eurozone economy outperformed expectations in 2022, despite the impact of the Russia-Ukraine war, but 2023 is expected to bring growth of just 0.1% as tighter monetary policy and high inflation put pressure on the economy.
Downside A 100% weighting to this scenario would result in a total expected credit loss provision on balance sheet at the reporting date of ~$950 million[(1)]	Possible	**Global:** The downside scenario projects annual growth in global GDP that is approximately 1 percentage point lower than the baseline until late 2024. **Australia:** The scenario projects stagnation over the 18 months to September 2024 due to continued inflationary pressure and further monetary tightening. Unemployment rises in the scenario to 5.5% by mid 2024 and recedes slowly in a low growth environment. House prices are projected to be impacted by higher interest rates, falling ~23% from 2022 highs. **United States:** The scenario projects five quarters of negative or zero growth beginning in mid-2023, resulting in a 3% fall in real GDP. Inflation remains sticky, however, and the US Fed delays rate cuts and the possible boost to the economy until disinflationary trends are clear. Unemployment is projected to increase 3 percentage points to 6.6% by mid-2024. **Europe:** The scenario projects a 2% fall in real GDP over the next 12 months, driving unemployment to around 8%. Equity markets are projected to fall around 7% and fail to recover to prior peaks in the forecast period to 2027.

(1) This number provides comparative ECL provision information as at the reporting date assuming the scenarios outlined, but does not reflect changes in the credit rating of the counterparties that may occur if these scenarios were to occur. Changes in credit ratings may have a material impact on these ECL provisions.

Note 12
Expected credit losses continued

Forward-looking information (FLI) continued

Scenario	Weighting	Expectation
Severe Downside A 100% weighting to this scenario would result in a total expected credit loss provision on balance sheet at the reporting date of ~$1,350 million(1)	Possible	**Global:** The scenario projects a sharp slowdown in annual GDP growth, around 3 to 3.5 percentage points lower than the baseline. The global economy is projected to contract by ~2.5% in the next twelve months and stagnates for the subsequent 12 months. **Australia:** The scenario projects five consecutive quarters of contraction in real GDP, resulting in a 2.5% decline in GDP by mid-2024. Unemployment peaks at 7.5% in late 2024, and house prices fall by 30% from their early 2022 peak. **United States:** The scenario projects a ~6% fall in GDP to the end of 2024, contracting for seven straight quarters and failing to recover prior output levels by the end of 2027. Unemployment reaches 8.8% by the end of 2024, and house prices fall by over 20%. **Europe:** The scenario projects a recession that extends until mid-2024, and output falls by 4% from current levels. Unemployment rates are projected to peak at ~9% and recede slowly.
Upside A 100% weighting to this scenario would result in a total expected credit loss provision on balance sheet at the reporting date of ~$600 million(1)	Unlikely	**Global:** The upside scenario projects annual growth in global GDP that is approximately 1 percentage point higher than the baseline scenario over the period until late 2024. **Australia:** The scenario projects a slight slowdown in GDP growth to under 2% annually, but growth remains positive throughout. Unemployment rates increase only modestly, remaining below 4.5%. Interest rate rises are sufficient to calm inflation without sharply impacting growth. **United States:** The scenario projects slowing GDP growth to 1% annually and the economy avoids any quarterly contractions. The Fed pauses monetary tightening as inflation recedes, engineering a 'soft landing' scenario. **Europe:** The scenario projects GDP to grow only 0.4% in 2023, including one quarterly contraction. Thereafter growth remains around 2% annually through to 2027 and unemployment stays broadly flat at 6.5–7%.

(1) This number provides comparative ECL provision information as at the reporting date assuming the scenarios outlined, but does not reflect changes in the credit rating of the counterparties that may occur if these scenarios were to occur. Changes in credit ratings may have a material impact on these ECL provisions.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 12
Expected credit losses continued

The table below presents the gross exposure and related ECL allowance for assets measured at amortised cost or FVOCI and off-balance sheet exposures subject to the impairment requirements of AASB 9 *Financial Instruments*.

	GROSS EXPOSURE FOR FINANCIAL ASSETS CARRIED AT				ECL ALLOWANCE ON FINANCIAL ASSETS CARRIED AT			
	Amortised cost $m	FVOCI $m	Other $m	Gross exposure $m	Amortised cost $m	FVOCI $m	Other $m	Total ECL allowance $m
								CONSOLIDATED 2023
Cash and bank balances	**41,613**	**–**	**–**	**41,613**	**1**	**–**	**–**	**1**
Cash collateralised lending and reverse repurchase agreements	**15,903**	**22,341**	**–**	**38,244**	**6**	**1**	**–**	**7**
Margin money and settlement assets	**18,850**	**–**	**–**	**18,850**	**51**	**–**	**–**	**51**
Financial investments	**1,721**	**14,870**	**–**	**16,591**	**–**	**3**	**–**	**3**
Held for sale and other assets	**2,619**	**4**	**–**	**2,623**	**94**	**–**	**–**	**94**
Loan assets	**142,200**	**–**	**–**	**142,200**	**624**	**–**	**–**	**624**
Due from related body corporate entities	**556**	**–**	**–**	**556**	**–**	**–**	**–**	**–**
Off balance sheet exposures	**–**	**–**	**22,534**	**22,534**	**–**	**–**	**65**	**65**
Total	**223,462**	**37,215**	**22,534**	**283,211**	**776**	**4**	**65**	**845**
								CONSOLIDATED 2022
Cash and bank balances	48,972	–	–	48,972	1	–	–	1
Cash collateralised lending and reverse repurchase agreements	11,155	27,223	–	38,378	4	–	–	4
Margin money and settlement assets	18,967	–	–	18,967	81	–	–	81
Financial investments	4	6,262	–	6,266	–	1	–	1
Held for sale and other assets	2,316	–	–	2,316	153	–	–	153
Loan assets	123,435	–	–	123,435	590	–	–	590
Due from related body corporate entities	1,399	–	–	1,399	–	–	–	–
Off balance sheet exposures	–	–	22,362	22,362	–	–	17	17
Total	206,248	33,485	22,362	262,095	829	1	17	847

Loan assets continue to represent the Consolidated Entity's most significant component of credit exposures on which ECL allowances are carried. The credit quality of the Consolidated Entity's loan assets, is monitored through its credit policies, as set out in Note 33.1 *Credit risk*.

Note 12
Expected credit losses continued

	GROSS EXPOSURE FOR FINANCIAL ASSETS CARRIED AT				ECL ALLOWANCE ON FINANCIAL ASSETS CARRIED AT			
	Amortised cost $m	FVOCI $m	Other $m	Gross exposure $m	Amortised cost $m	FVOCI $m	Other $m	Total ECL allowance $m
								COMPANY 2023
Cash and bank balances	**36,176**	**–**	**–**	**36,176**	**–**	**–**	**–**	**–**
Cash collateralised lending and reverse repurchase agreements	**15,692**	**22,195**	**–**	**37,887**	**6**	**–**	**–**	**6**
Margin money and settlement assets	**14,513**	**–**	**–**	**14,513**	**45**	**–**	**–**	**45**
Financial investments	**1,126**	**13,334**	**–**	**14,460**	**–**	**3**	**–**	**3**
Held for sale and other assets	**2,297**	**–**	**–**	**2,297**	**52**	**–**	**–**	**52**
Loan assets	**138,448**	**2,145**	**–**	**140,593**	**524**	**40**	**–**	**564**
Due from related body corporate entities	**340**	**–**	**–**	**340**	**–**	**–**	**–**	**–**
Due from subsidiaries	**9,815**	**92**	**–**	**9,907**	**12**	**–**	**–**	**12**
Off balance sheet exposures	**–**	**–**	**21,427**	**21,427**	**–**	**–**	**64**	**64**
Total	**218,407**	**37,766**	**21,427**	**277,600**	**639**	**43**	**64**	**746**
								COMPANY 2022
Cash and bank balances	43,594	–	–	43,594	–	–	–	–
Cash collateralised lending and reverse repurchase agreements	10,447	23,588	–	34,035	4	–	–	4
Margin money and settlement assets	13,873	–	–	13,873	64	–	–	64
Financial investments	4	6,262	–	6,266	–	–	–	–
Held for sale and other assets	1,825	–	–	1,825	109	–	–	109
Loan assets	118,268	3,304	–	121,572	479	48	–	527
Due from related body corporate entities	1,122	–	–	1,122	–	–	–	–
Due from subsidiaries	11,621	140	–	11,761	15	–	–	15
Off balance sheet exposure	–	–	25,890	25,890	–	–	17	17
Total	200,754	33,294	25,890	259,938	671	48	17	736

Note 12
Expected credit losses continued

The table below provides a reconciliation from the opening to closing balance of the ECL allowances.

	Cash and bank balances $m	Cash collateralised lending and reverse repurchase agreements $m	Margin money and settlement assets $m	Financial investments $m	Held for sale and other assets $m	Loan assets $m	Due from related body corporate entities $m	Off balance sheet exposures $m	Total $m
									CONSOLIDATED
Balance as at 1 Apr 2021	–	–	54	6	111	776	1	24	972
Credit impairment charges/ (reversals) (Note 2)	–	–	28	–	74	(77)	–	(7)	18
Amount written off, previously provided for	–	–	–	–	(26)	(74)	–	–	(100)
Reclassifications, foreign exchange and other movements	1	4	(1)	(5)	(6)	(35)	(1)	–	(43)
Balance as at 31 Mar 2022	1	4	81	1	153	590	–	17	847
Credit impairment charges/ (reversals) (Note 2)	**–**	**3**	**(33)**	**2**	**1**	**100**	**–**	**46**	**119**
Amount written off, previously provided for	**–**	**–**	**–**	**–**	**(63)**	**(72)**	**–**	**–**	**(135)**
Reclassifications, foreign exchange and other movements	**–**	**–**	**3**	**–**	**3**	**6**	**–**	**2**	**14**
Balance as at 31 Mar 2023	**1**	**7**	**51**	**3**	**94**	**624**	**–**	**65**	**845**

	Cash collateralised lending and reverse repurchase agreements $m	Margin money and settlement assets $m	Financial investments $m	Held for sale and other assets $m	Loan assets $m	Due from subsidiaries $m	Off balance sheet exposures $m	Total $m
								COMPANY
Balance as at 1 Apr 2021	–	25	1	77	433	15	14	565
Credit impairment charges (Note 2)	–	39	–	44	147	–	2	232
Amount written off, previously provided for	–	–	–	(6)	(43)	–	–	(49)
Reclassifications, foreign exchange and other movements	4	–	(1)	(6)	(10)	–	1	(12)
Balance as at 31 Mar 2022	4	64	–	109	527	15	17	736
Credit impairment charges/ (reversals) (Note 2)	**2**	**(21)**	**3**	**(5)**	**100**	**–**	**47**	**126**
Amount written off, previously provided for	**–**	**–**	**–**	**(53)**	**(68)**	**–**	**–**	**(121)**
Reclassifications, foreign exchange and other movements	**–**	**2**	**–**	**1**	**5**	**(3)**	**–**	**5**
Balance as at 31 Mar 2023	**6**	**45**	**3**	**52**	**564**	**12**	**64**	**746**

Note 12
Expected credit losses continued

The table below provides a reconciliation of the ECL allowance on loan assets to which the impairment requirements under AASB 9 *Financial Instruments* are applied.

		LIFETIME ECL		
	Stage I 12 month ECL $m	Stage II Not credit impaired $m	Stage III Credit impaired $m	Total $m
				CONSOLIDATED
Balance as at 1 Apr 2021	315	202	259	776
Transfers during the year	33	(3)	(30)	–
Credit impairment charges/(reversals) (Note 2)	(107)	(11)	41	(77)
Amount written off, previously provided for	–	–	(74)	(74)
Reclassifications, foreign exchange and other movements	(27)	(1)	(7)	(35)
Balance as at 31 Mar 2022	214	187	189	590
Transfers during the year	26	(17)	(9)	–
Credit impairment charges (Note 2)	60	–	40	100
Amount written off, previously provided for	–	–	(72)	(72)
Reclassifications, foreign exchange and other movements	2	(1)	5	6
Balance as at 31 Mar 2023	**302**	**169**	**153**	**624**
				COMPANY
Balance as at 1 Apr 2021	157	132	144	433
Transfers during the year	40	(27)	(13)	–
Credit impairment charges/(reversals) (Note 2)	(1)	61	87	147
Amount written off, previously provided for	–	–	(43)	(43)
Reclassifications, foreign exchange and other movements	(3)	2	(9)	(10)
Balance as at 31 Mar 2022	193	168	166	527
Transfers during the year	**25**	**(19)**	**(6)**	**–**
Credit impairment charges (Note 2)	**51**	**8**	**41**	**100**
Amount written off, previously provided for	**–**	**–**	**(68)**	**(68)**
Reclassifications, foreign exchange and other movements	**–**	**–**	**5**	**5**
Balance as at 31 Mar 2023	**269**	**157**	**138**	**564**

Note 13
Property, plant and equipment and right-of-use assets

	2023			2022		
	Cost $m	Accumulated depreciation and impairment $m	Carrying value $m	Cost $m	Accumulated depreciation and impairment $m	Carrying value $m
						CONSOLIDATED
Assets for own use						
Land and buildings	856	(41)	815	626	(36)	590
Furniture, fittings and leasehold improvements	604	(452)	152	478	(416)	62
Equipment	115	(68)	47	93	(61)	32
Total assets for own use	1,575	(561)	1,014	1,197	(513)	684
Assets under operating lease						
Meters	2,558	(1,082)	1,476	2,268	(904)	1,364
Telecommunications	1,699	(666)	1,033	1,439	(630)	809
Equipment and other	868	(214)	654	535	(121)	414
Total assets under operating lease	5,125	(1,962)	3,163	4,242	(1,655)	2,587
Right-of-use assets						
Office premises	713	(370)	343	538	(284)	254
Commodity storage	77	(46)	31	38	(31)	7
Other	40	(14)	26	14	(10)	4
Total assets under right-of-use	830	(430)	400	590	(325)	265
Total property, plant and equipment and right-of-use assets	7,530	(2,953)	4,577	6,029	(2,493)	3,536

The majority of the above amounts have expected useful lives longer than 12 months after the balance date.

	2023 Cost $m	2023 Accumulated depreciation and impairment $m	2023 Carrying value $m	2022 Cost $m	2022 Accumulated depreciation and impairment $m	2022 Carrying value $m
						COMPANY
Assets for own use						
Land and buildings	617	-	617	386	-	386
Furniture, fittings and leasehold improvements	81	(11)	70	13	(11)	2
Equipment	14	(9)	5	11	(7)	4
Total assets for own use	712	(20)	692	410	(18)	392
Assets under operating lease						
Meters	2,321	(871)	1,450	2,015	(687)	1,328
Telecommunications	1,696	(665)	1,031	1,439	(630)	809
Land and buildings	374	(119)	255	391	(119)	272
Total assets under operating lease	4,391	(1,655)	2,736	3,845	(1,436)	2,409
Total property, plant and equipment	5,103	(1,675)	3,428	4,255	(1,454)	2,801

The majority of the above amounts have expected useful lives longer than 12 months after the balance date.

Note 13
Property, plant and equipment and right-of-use assets continued

The movement in the carrying value of the Consolidated Entity's property, plant and equipment was as follows.

	Land and buildings $m	Furniture, fittings and leasehold improvements $m	Equipment $m	Total $m
				CONSOLIDATED
Assets for own use				
Balance as at 1 Apr 2021	460	94	29	583
Acquisitions and additions	127	9	23	159
Depreciation expense (Note 2)	(5)	(33)	(18)	(56)
Reclassification and other adjustments	8	(8)	(2)	(2)
Balance as at 31 Mar 2022[1]	590	62	32	684
Acquisitions and additions	**230**	**118**	**57**	**405**
Disposals	**–**	**–**	**(23)**	**(23)**
Depreciation expense (Note 2)	**(5)**	**(30)**	**(19)**	**(54)**
Impairments	**–**	**–**	**(1)**	**(1)**
Foreign exchange movements	**–**	**2**	**1**	**3**
Balance as at 31 Mar 2023[1]	**815**	**152**	**47**	**1,014**

	Meters $m	Telecommunication $m	Equipment and other $m	Total $m
				CONSOLIDATED
Assets under operating lease				
Balance as at 1 Apr 2021	1,371	131	342	1,844
Acquisitions and additions	270	684	183	1,137
Disposals	–	(1)	(15)	(16)
Depreciation expense (Note 2)	(191)	(35)	(91)	(317)
Reclassification and other adjustments[2]	(40)	54	(4)	10
Foreign exchange movements	(46)	(24)	(1)	(71)
Balance as at 31 Mar 2022	1,364	809	414	2,587
Acquisitions and additions	**262**	**265**	**362**	**889**
Disposals	**–**	**–**	**(20)**	**(20)**
Depreciation expense (Note 2)	**(190)**	**(35)**	**(121)**	**(346)**
Reclassification and other adjustment[2]	**(33)**	**(51)**	**(10)**	**(94)**
Foreign exchange movements	**73**	**45**	**29**	**147**
Balance as at 31 Mar 2023	**1,476**	**1,033**	**654**	**3,163**

(1) Includes $676 million (2022: $377 million) capital work in progress related to building construction and improvements for Martin Place Metro Project.
(2) Includes $51 million loss (2022: $54 million gain) fair value hedge adjustment. Refer to Note 32 *Hedge accounting*.

Note 13
Property, plant and equipment and right-of-use assets continued

The movement in the carrying value of the Company's property, plant and equipment was as follows.

	Land and buildings $m	Furniture, fittings and leasehold improvements $m	Equipment $m	Total $m
				COMPANY
Assets for own use				
Balance as at 1 Apr 2021	250	12	4	266
Acquisitions and additions	127	1	3	131
Reclassification and other adjustments	9	(9)	–	–
Depreciation expense (Note 2)	–	(2)	(3)	(5)
Balance as at 31 Mar 2022 [1]	386	2	4	392
Acquisitions and additions	231	70	4	305
Depreciation expense (Note 2)	–	(2)	(3)	(5)
Balance as at 31 Mar 2023 [1]	**617**	**70**	**5**	**692**

	Meters $m	Telecommunication $m	Land and buildings $m	Total $m
				COMPANY
Assets under operating lease				
Balance as at 1 Apr 2021	–	132	274	406
Acquisitions and additions	1,490	683	13	2,186
Disposals	–	–	(2)	(2)
Reclassifications and other adjustments [2]	(16)	54	–	38
Foreign exchange movements	(85)	(25)	–	(110)
Depreciation expense (Note 2)	(61)	(35)	(13)	(109)
Balance as at 31 Mar 2022	1,328	809	272	2,409
Acquisitions and additions	**263**	**263**	**11**	**537**
Disposals	**–**	**–**	**(2)**	**(2)**
Reclassifications and other adjustments [2]	**(31)**	**(51)**	**(13)**	**(95)**
Foreign exchange movements	**72**	**45**	**–**	**117**
Depreciation expense (Note 2)	**(182)**	**(35)**	**(13)**	**(230)**
Balance as at 31 Mar 2023	**1,450**	**1,031**	**255**	**2,736**

(1) Includes $679 million (2022: $377 million) capital work in progress related to building construction and improvements for Martin Place Metro Project.
(2) Includes $51 million loss (2022: $54 million gain) fair value hedge adjustment. Refer to Note 32 *Hedge accounting*.

Note 13
Property, plant and equipment and right-of-use assets continued

The movement in the carrying value of the Consolidated Entity's ROU was as follows.

	Office premises $m	Commodity storage $m	Other $m	Total $m
				CONSOLIDATED
Right-of-use assets				
Balance as at 1 Apr 2021	349	13	8	370
Acquisitions and additions	17	4	3	24
Disposals	(11)	–	–	(11)
Depreciation expense[1]	(94)	(10)	(7)	(111)
Impairments	(4)	–	–	(4)
Foreign exchange movements and other adjustments	(3)	–	–	(3)
Balance as at 31 Mar 2022	254	7	4	265
Acquisitions and additions	**169**	**34**	**27**	**230**
Disposals	**(8)**	**–**	**–**	**(8)**
Depreciation expense[1]	**(95)**	**(11)**	**(5)**	**(111)**
Impairment reversals	**1**	**–**	**–**	**1**
Foreign exchange movements and other adjustments	**22**	**1**	**–**	**23**
Balance as at 31 Mar 2023	**343**	**31**	**26**	**400**

The future minimum lease payments expected to be received under non-cancellable operating leases are as follows.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Assets under operating lease				
Within one year	**304**	199	**110**	111
Between one to two years	**222**	179	**97**	105
Between two to three years	**74**	112	**30**	90
Between three to four years	**20**	24	**23**	23
Between four to five years	**11**	11	**2**	18
Later than five years	**–**	7	**–**	1
Total future minimum lease payments receivable	**631**	532	**262**	348

(1) Includes depreciation expense of $95 million (2022: $94 million) on office premise leases presented under other operating expenses and $11 million (2022: $10 million) on assets held for trading-related business presented under net trading income and $4 million (2022: $7 million) on technology leases presented under non-salary technology expenses in Note 2 *Operating profit before income tax*.

Note 14
Investment in subsidiaries

	COMPANY	
	2023 $m	2022 $m
Investment at cost with no provisions for impairment	**4,693**	6,172
Investment at cost with provisions for impairment	**126**	183
Less: provisions for impairment[1]	**(45)**	(68)
Investment with provisions for impairment[1]	**81**	115
Total investment in subsidiaries	**4,774**	6,287

The above amounts are expected to be recovered after 12 months of the balance date by the Company.

The following are the Company's notable subsidiaries:

Australia

- Macquarie Group Services Australia Pty Ltd
- Macquarie International Finance Limited
- Macquarie Offshore Services Pty Ltd
- Macquarie Equities Limited
- Macquarie Investment Management Ltd

Americas

- Macquarie Energy LLC (United States)
- Macquarie America Holdings Inc. (United States)
- Macquarie Global Services (USA) LLC (United States)
- Macquarie Futures USA LLC (United States)

Asia Pacific

- Macquarie Global Services Private Limited (India)
- Macquarie Group Services (Philippines), Inc. (Philippines)

Europe, Middle East and Africa

- Macquarie Bank Europe Designated Activity Company (Ireland)
- Macquarie Investments 1 Limited (United Kingdom)

The subsidiaries included in the notable subsidiaries list above are identified on the basis of their ongoing contribution to the Consolidated Entity's external assets and operating profit. Additionally, these include the major employing entities, entities that are key providers of funding to other subsidiaries and other operating entities considered key for each Operating Group and region.

The list of notable subsidiaries has been categorised based on the geographic region of their incorporation. The country of incorporation has been stated in brackets. For entities in the Australia region, the country of incorporation is Australia. Overseas subsidiaries conduct business predominantly in their place of incorporation. Notable subsidiaries may conduct business in other geographic regions through branches, the branches have not been included in the list of notable subsidiaries.

All notable subsidiaries have a 31 March reporting date.

Significant restrictions

During the year, the Company's subsidiaries did not experience any significant restrictions on paying dividends, accessing or using assets and settling liabilities of the Consolidated Entity. There are no foreseen restrictions envisaged with regard to planned dividends or payments. However, the ability of subsidiaries to pay dividends or advance monies to the Company depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance.

(1) In accordance with its accounting policies, the Company reviewed its investments in subsidiaries for indicators of impairment and, where applicable, reversal of impairment. Where its investments had indicators of reversal of impairment, the investments' carrying value was compared to its recoverable value which was determined as the higher of value-in-use and fair value less cost to sell (valuation). The valuations, which are classified as Level 3 in the fair value hierarchy as defined in Note 35 *Fair value of assets and liabilities*, have been calculated using a valuation technique with significant inputs including the subsidiary's maintainable earnings, growth rates and relevant earnings' multiples.

Note 15
Deferred tax assets/(liabilities)

The balance comprises temporary differences attributable to:

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Other assets and liabilities	**945**	789	**450**	416
Tax losses	**61**	50	**4**	13
Property, plant and equipment	**69**	70	**1**	7
Intangible assets	**151**	130	**104**	93
Financial investments and interests in associates and joint ventures	**50**	14	**17**	20
Loan assets and derivatives	**196**	24	**188**	–
Operating and finance leases	**17**	4	**–**	–
Set-off of deferred tax liabilities	**(401)**	(184)	**(92)**	(147)
Net deferred tax assets	**1,088**	897	**672**	402
Operating and finance lease assets	**(171)**	(178)	**(104)**	(129)
Loan and derivative assets	**(141)**	(7)	**(9)**	(46)
Other assets and liabilities	**(66)**	(18)	**(3)**	–
Financial investments and interests in associates and joint ventures	**(33)**	(3)	**(1)**	(1)
Property, plant and equipment	**(6)**	(1)	**–**	–
Intangible assets	**(7)**	(5)	**–**	–
Set-off of deferred tax assets	**401**	184	**92**	147
Net deferred tax liabilities	**(23)**	(28)	**(25)**	(29)

The above amounts are expected to be recovered after 12 months of the balance date by the Consolidated Entity and the Company.

Potential tax assets of approximately $98 million (2022: $96 million) attributable to tax losses carried forward by subsidiaries and other timing differences have not been brought to account in the Consolidated Entity as Management do not believe that the realisation of the tax assets is probable. Included in this amount are $nil gross losses (2022: $nil) that will expire within two years; $0.3 million (2022: $1 million) that will expire in 2–5 years; $19 million (2022: $97 million) that will expire in 5–10 years and $126 million (2022: $61 million) that will expire in 10–20 years. $418 million (2022: $401 million) of gross losses do not expire and can be carried forward indefinitely.

Note 16
Trading liabilities

	CONSOLIDATED		COMPANY	
	2023	2022	**2023**	2022
	$m	$m	**$m**	$m
Listed equity securities	**4,713**	5,173	**4,717**	5,178
Debt securities	**41**	33	**40**	32
Total trading liabilities	**4,754**	5,206	**4,757**	5,210

Note 17
Margin money and settlement liabilities

Margin money	**17,085**	16,244	**13,536**	11,651
Commodity settlements	**2,828**	4,370	**1,829**	3,063
Security settlements	**2,000**	963	**1,999**	879
Total margin money and settlement liabilities	**21,913**	21,577	**17,364**	15,593

Note 18
Derivative liabilities

Held for trading	**31,423**	83,584	**26,353**	70,988
Designated in hedge relationships	**1,099**	607	**1,068**	533
Total derivative liabilities	**32,522**	84,191	**27,421**	71,521

Note 19
Deposits

Interest bearing deposits:				
Call	**89,876**	76,171	**89,793**	76,130
Term	**23,367**	8,534	**22,479**	8,393
Non-interest-bearing deposits – repayable on demand	**21,405**	16,909	**21,389**	16,894
Total deposits	**134,648**	101,614	**133,661**	101,417

Note 20
Other liabilities

	CONSOLIDATED		COMPANY	
	2023	2022	**2023**	2022
	$m	$m	**$m**	$m
Other financial liabilities				
Commodity-related payables	**1,158**	1,208	**675**	801
Creditors	**1,064**	609	**818**	409
Lease liabilities	**456**	357	**1**	1
Unitholder liabilities	**–**	10	**–**	–
Total other financial liabilities	**2,678**	2,184	**1,494**	1,211
Other non-financial liabilities				
Employment-related liabilities	**1,933**	1,465	**657**	538
Provisions[(1)]	**1,383**	953	**817**	678
Accrued charges and other payables	**653**	249	**427**	118
Income tax provision[(2)]	**518**	460	**228**	131
Indirect tax payables	**83**	64	**9**	7
Other	**379**	369	**331**	339
Total other non-financial liabilities	**4,949**	3,560	**2,469**	1,811
Total other liabilities	**7,627**	5,744	**3,963**	3,022

(1) In the ordinary course of its business, the Consolidated Entity and the Company may be subject to actual and potential civil claims and regulatory enforcement actions. During the current year, these include matters in the Commonwealth of Australia, the United States of America, the United Kingdom, and the Federal Republic of Germany. The civil claims may result in settlements or damages awards. The regulatory enforcement actions may result in outcomes such as penalties, fines, disgorgement of profits and non-monetary sanctions. This amount includes provisions for such outcomes. The amount and timing of the outcomes are uncertain and may differ from the provisions recognised. Based on existing information, the range of likely outcomes, and any change in provisions during the current year, did not have and are not currently expected to have a material impact on the Consolidated Entity. The Consolidated Entity and the Company consider the risk of there being a material adverse effect in respect of claims and actions that have not been provided for to be remote.

(2) Revenue authorities undertake risk reviews and audits as part of their normal activities. The Consolidated Entity has assessed these and other taxation claims and litigation, including seeking external advice where appropriate, and considers that it holds appropriate provisions.

Note 21
Issued debt securities

	CONSOLIDATED		COMPANY	
	2023	2022	**2023**	2022
	$m	$m	**$m**	$m
Commercial paper	**23,466**	35,060	**23,466**	35,060
Bonds	**19,464**	21,341	**19,490**	21,336
Securitised notes[1]	**11,424**	13,380	**-**	-
Certificates of deposits	**2,274**	741	**2,274**	741
Structured notes[2],[3]	**1,351**	1,585	**1,351**	1,585
Total issued debt securities	**57,979**	72,107	**46,581**	58,722

The Consolidated Entity and the Company have not had any defaults of principal, interest or other breaches with respect to its issued debt securities during the financial years reported.

Reconciliation of issued debt securities by major currency *(In Australian dollar equivalent)*				
United States dollar	**31,860**	40,422	**31,858**	40,419
Australian dollar	**19,586**	22,144	**8,160**	8,762
Euro	**3,425**	4,689	**3,455**	4,689
Pound sterling	**1,740**	3,317	**1,740**	3,317
Swiss franc	**818**	1,060	**818**	1,060
Other	**550**	475	**550**	475
Total issued debt securities	**57,979**	72,107	**46,581**	58,722

(1) Represents payable to note holders and debt holders for which loan assets are held by consolidated Structured Entities (SEs) and are available as security. Refer to Note 37 *Pledged assets and transfer of financial assets* for the details of assets pledged for the liabilities of the Consolidated Entity.
(2) The amount that would be contractually required to be paid at maturity to the holders of issued debt securities measured at DFVTPL for the Consolidated Entity and the Company is $1,533 million (2022: $1,706 million). This amount is based on the final notional amount rather than the fair value. Refer to Note 34 *Measurement categories of financial instruments* for the carrying value of issued debt securities measured at DFVTPL.
(3) Includes a cumulative fair value gain recognised in OCI of $15 million (2022: $6 million loss) due to changes in own credit risk on DFVTPL debt securities recognised in OCI.

Note 22
Capital management

Capital management strategy

The Consolidated Entity's capital management strategy is to maximise shareholder value through optimising the mix, level and use of capital resources, whilst also providing the flexibility to take advantage of opportunities as they may arise.

The Consolidated Entity's capital management objectives are to maintain sufficient capital resources to:

- support the Consolidated Entity's business and operational requirements
- safeguard interest of depositors' and the Consolidated Entity's ability to continue as a going concern
- exceed regulatory capital requirements
- support the Consolidated Entity's credit rating.

The Consolidated Entity's capital management strategy uses both internal and external measures of capital. Internally, the Consolidated Entity has developed an Economic Capital Adequacy Model (ECAM) that complements the management of specific risk types such as equity, credit, market and operational risk by providing an aggregate view of the Consolidated Entity's risk profile. Externally, the Consolidated Entity is subject to minimum capital requirements imposed by the Australian Prudential Regulation Authority (APRA).

Measures of capital used to support business decision-making include:

- capital adequacy assessment
- risk appetite setting
- risk-adjusted performance measurement.

The Consolidated Entity's capital management strategy is evaluated annually through an Internal Capital Adequacy Assessment Process (ICAAP).

Regulatory capital framework

Regulatory capital requirements are imposed and measured at two levels of consolidation within the Consolidated Entity:

- **Level 1**: The Company and certain subsidiaries which meet the APRA definition of Extended Licensed Entities
- **Level 2**: The Company, its subsidiaries and its immediate parent less certain subsidiaries of the Company which are deconsolidated for APRA reporting purposes. These include entities conducting insurance, funds management and non-financial operations.

The Consolidated Entity reports to APRA under APRA's Basel III capital requirements and is accredited by APRA to apply the Basel III Foundation Internal Ratings Based Approach for credit risk, and the Internal Model Approach for market risk and interest rate risk in the banking book.

APRA requires Authorised Deposit-taking Institutions (ADIs) such as the Consolidated Entity to hold a minimum level of regulatory capital against its risk-weighted assets (RWA) for each category of capital. APRA classifies an ADI's regulatory capital into three categories:

- **Common Equity Tier 1 (CET1)**: Consists of share capital, retained earnings, and certain reserves, less prescribed regulatory adjustments including deductions for intangibles, certain capitalised expenses, deferred tax assets, equity investments and investments in certain subsidiaries
- **Tier 1 Capital**: The sum of CET1 Capital and Additional Tier 1 (AT1) Capital. AT1 Capital consists of hybrid instruments
- **Total Capital**: The sum of Tier 1 Capital and Tier 2 Capital. Tier 2 Capital includes term subordinated debt, certain reserves and applicable regulatory adjustments.

Information on hybrid and Tier 2 Capital instruments on issue is available in the Regulatory Disclosures section of the Macquarie public website.

Under APRA's Basel III prudential requirements, ADIs such as the Consolidated Entity are required to maintain a minimum ratio of regulatory capital to RWA of 4.5% for CET1, 6.0% for Tier 1 and 8.0% for Total Capital. The requirement applies at both Level 1 and Level 2. APRA may also impose an ADI specific minimum capital ratio that may be higher than these levels.

In addition, APRA requires ADIs to hold a capital conservation buffer of up to 3.75% in the form of CET1 Capital. The Consolidated Entity is also required to hold an ADI specific countercyclical capital buffer (CCyB) in the form of CET1 Capital.

Under APRA's Basel III prudential requirements, ADIs such as the Consolidated Entity are also required to hold a minimum level of Tier 1 Capital against its regulatory total exposures (Leverage Ratio). The minimum required Leverage Ratio is 3.5%.

The Consolidated Entity has complied with minimum capital requirements at Level 1 and Level 2 throughout the financial year.

Note 23
Loan capital

Subordinated debt

Subordinated debt comprises of agreements between the Consolidated Entity and its lenders that provide that, in the event of liquidation, entitlement of such lenders to repayment of the principal sum and interest thereon is and shall at all times be and remain subordinated to the rights of all other present and future creditors of the Consolidated Entity.

The table below highlights key capital instruments with conditional repayment obligations (Tier 1 loan capital under APRA's Capital Standards) issued by the Consolidated Entity and the Company.

Contract feature	Macquarie Additional Capital Securities	Macquarie Bank Capital Notes 2	Macquarie Bank Capital Notes 3
Code	MACS	BCN2	BCN3
Issuer	Macquarie Bank Limited	Macquarie Bank Limited	Macquarie Bank Limited
Par value	n/a	$100	$100
Currency	USD	AUD	AUD
Carrying value at reporting date	$USD 750 million/($A1,064 million)	$641 million	$655 million
Accounting measurement basis	Financial liability at amortised cost	Financial liability at amortised cost	Financial liability at amortised cost
Issue date	8 March 2017	2 June 2020	27 August 2021
Interest rate	6.125% per annum	90-day BBSW plus a fixed margin of 4.70% per annum, adjusted for franking credits	90-day BBSW plus a fixed margin of 2.90% per annum, adjusted for franking credits
Interest payment frequency	Semi-annually in arrears	Quarterly in arrears	Quarterly in arrears
Interest payment	Discretionary, non-cumulative	Discretionary, non-cumulative	Discretionary, non-cumulative
Dividend stopper	MBL only	MBL only	MBL only
Outstanding notes at reporting date	—[1]	6.41 million	6.55 million
Maturity	Perpetual, redeemable subject to APRA's written approval, and at the discretion of MBL in limited circumstances	Perpetual unless redeemed, resold, converted, exchanged or written-off in accordance with the terms of the instrument	Perpetual unless redeemed, resold, converted, exchanged or written-off in accordance with the terms of the instrument
Convertible into ordinary shares	Yes	Yes	Yes
Convertible into issuer shares	MGL	MGL	MGL
Mandatory conversion date	n/a	21 December 2028	8 September 2031
Maximum number of shares on conversion	56,947,286	30,532,190	20,316,704
Optional exchange dates	No optional exchange dates	• 21 December 2025 • 21 June 2026 • 21 December 2026 • earlier in specified circumstances at the discretion of MBL subject to APRA approval	• 7 September 2028 • 7 March 2029 • 7 September 2029 • earlier in specified circumstances at the discretion of MBL subject to APRA approval
Other exchange events	• acquisition date (where a party acquires control of MBL or MGL) • where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support) • where MBL's common equity Tier 1 Capital ratio falls below 5.125%	• acquisition date (where a party acquires control of MBL or MGL) • where APRA determines MBL would be non-viable without an exchange or conversion or write-off, of other Relevant Tier-1 securities is necessary or a public sector injection of capital (or equivalent support) • where MBL's common equity Tier 1 Capital ratio falls below 5.125%	• acquisition date (where a party acquires control of MBL or MGL) • where APRA determines MBL would be non-viable without an exchange or conversion or write-off, of other Relevant Tier-1 securities is necessary or a public sector injection of capital (or equivalent support) • where MBL's common equity Tier 1 Capital ratio falls below 5.125%
Capital treatment	Additional Tier 1 capital	Additional Tier 1 capital	Additional Tier 1 capital

(1) As at 31 March 2023, the US$750 million of MACS were held by an authorised representative for the Depository Trust Company being the common depository for the MACS global security.

Note 23
Loan capital continued

In addition to the subordinated debt with conditional repayment obligations, the Consolidated Entity has also issued certain capital instruments with fixed repayment obligations, denominated in United States dollars and Australian dollars which are eligible Tier 2 capital under APRA's capital standards.

The table below discloses the carrying value of Loan capital at the balance sheet date. Where these instruments are designated in fair value hedge accounting relationships, the carrying value includes the fair value hedge adjustment (refer to Note 32 *Hedge accounting*). The contractual undiscounted cash flows are disclosed in Note 33.2 *Liquidity risk*.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Subordinated debt with fixed repayment obligations (Tier 2 loan capital), by contractual maturity dates:				
10 June 2025	**1,075**	993	**1,075**	993
28 May 2030	**750**	750	**750**	750
3 June 2030	**921**	874	**921**	874
17 June 2031	**750**	750	**750**	750
7 June 2032	**849**	–	**849**	–
18 January 2033	**1,497**	–	**1,497**	–
3 March 2036	**1,282**	1,231	**1,282**	1,231
Instruments with conditional repayment obligations (Tier 1 loan capital):				
MACS	**1,064**	998	**1,064**	998
BCN2	**641**	641	**641**	641
BCN3	**655**	655	**655**	655
Accrued interest payable as per terms of instruments:				
Less than 12 months	**78**	39	**78**	39
	9,562	6,931	**9,562**	6,931
Less: directly attributable issue costs	**(39)**	(35)	**(39)**	(35)
Total loan capital	**9,523**	6,896	**9,523**	6,896
Reconciliation of loan capital by major currency: *(In Australian dollar equivalent)*				
United States dollar	**5,896**	4,131	**5,896**	4,131
Australian dollar	**3,666**	2,800	**3,666**	2,800
	9,562	6,931	**9,562**	6,931
Less: directly attributable issue costs	**(39)**	(35)	**(39)**	(35)
Total loan capital	**9,523**	6,896	**9,523**	6,896

The Consolidated Entity and the Company have not had any defaults of principal, interest or other breaches with respect to their loan capital during the financial years reported.

Note 24
Contributed equity

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Ordinary share capital	**9,879**	9,279	**9,879**	9,279
Other equity	**282**	283	**134**	137
Total contributed equity	**10,161**	9,562	**10,013**	9,416

	CONSOLIDATED AND COMPANY			
	2023 Number of shares	2022 Number of shares	**2023 $m**	2022 $m
(i) Ordinary share capital[1]				
Opening balance of fully paid ordinary shares	**674,817,171**	634,361,966	**9,279**	8,279
Issue of shares to parent entity (Macquarie B.H. Pty Limited):				
on 30 June 2022 at $27.54 per share	**21,786,493**	–	**600**	–
on 30 December 2021 at $25.37 per share	**–**	19,708,317	**–**	500
on 30 September 2021 at $24.10 per share	**–**	20,746,888	**–**	500
Closing balance of fully paid ordinary shares	**696,603,664**	674,817,171	**9,879**	9,279

(ii) Other equity[2]

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Equity contribution from ultimate parent entity				
Balance at the beginning of the financial year	**283**	244	**137**	121
Change attributable to share-based payment expense including deferred tax	**(1)**	39	**(3)**	16
Balance at the end of the financial year	**282**	283	**134**	137

(1) Ordinary shares have no par value.
(2) Capital contribution by ultimate parent MGL towards MEREP awards issued to employees of the Consolidated Entity, where MGL is not subsequently reimbursed by the Consolidated Entity.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 25
Reserves and retained earnings

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
(i) Reserves				
Foreign currency translation reserve				
Balance at the beginning of the financial year	**438**	397	**(202)**	(21)
Foreign exchange movement on translation and hedge accounting of foreign operations, net of tax	**562**	41	**551**	(181)
Balance at the end of the financial year	**1,000**	438	**349**	(202)
FVOCI reserve				
Balance at the beginning of the financial year	**4**	35	**44**	59
Revaluation movement, net of tax	**(6)**	(28)	**(43)**	(16)
Changes in ECL allowance, net of tax	**2**	(3)	**(3)**	1
Balance at the end of the financial year	**–**	4	**(2)**	44
Cash flow hedge reserve				
Balance at the beginning of the financial year	**8**	(113)	**10**	(40)
Revaluation movement, net of tax	**65**	77	**92**	77
Transferred to income statement on realisation, net of tax	**19**	44	**2**	(27)
Balance at the end of the financial year	**92**	8	**104**	10
Cost of hedging and other reserves				
Balance at the beginning of the financial year	**(18)**	(13)	**(16)**	(8)
Revaluation movement, net of tax	**(33)**	(8)	**(30)**	–
Transferred to income statement on realisation, net of tax	**16**	3	**14**	(8)
Balance at the end of the financial year	**(35)**	(18)	**(32)**	(16)
Total reserves at the end of the financial year	**1,057**	432	**419**	(164)
(ii) Retained earnings				
Balance at the beginning of the financial year	**7,974**	5,245	**9,015**	3,924
Profit attributable to the ordinary equity holder of MBL	**3,905**	2,717	**3,757**	5,103
Dividends paid on ordinary share capital (Note 5)	**(2,749)**	–	**(2,749)**	–
Fair value changes attributable to own credit risk on debt classified at DFVTPL, net of tax	**1**	12	**2**	12
Remeasurement of defined benefit plans	**3**	–	**2**	–
Change attributable to group structure	**–**	–	**–**	(24)
Balance at the end of the financial year	**9,134**	7,974	**10,027**	9,015

Note 26
Notes to the statements of cash flows

(i) Reconciliation of cash and cash equivalents

Cash and cash equivalents at the end of the financial year are reflected in the relevant items in the Statements of financial position as follows.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Cash and bank balances[(1),(2)]	**35,952**	45,604	**31,491**	41,424
Cash collateralised lending and reverse repurchase agreements	**20,027**	25,391	**20,027**	21,888
Financial investments	**5,203**	1,366	**5,045**	1,366
Cash and cash equivalents at the end of the financial year	**61,182**	72,361	**56,563**	64,678

(ii) Reconciliation of profit after income tax to net cash flows generated from operating activities

	CONSOLIDATED 2023 $m	CONSOLIDATED 2022 $m	COMPANY 2023 $m	COMPANY 2022 $m
Profit after income tax	**3,905**	2,717	**3,757**	5,103
Adjustments to profit after income tax:				
Depreciation and amortisation	**523**	507	**246**	134
Expected credit losses and other impairment charges	**115**	28	**162**	212
Investment income and gain on sale of operating lease assets and other non-financial assets	**(51)**	(529)	**(65)**	(1,415)
Share of net (profits)/losses of associates and joint ventures	**(26)**	(39)	**-**	-
Changes in assets and liabilities:				
Issued debt securities	**(19,247)**	27,369	**(17,512)**	24,182
Trading and related assets, liquid investments and collateralised lending balances (net of liabilities)	**(16,671)**	9,810	**(12,532)**	4,816
Deposits	**32,962**	17,472	**31,772**	17,415
Borrowings and other funding	**1,771**	13,330	**(597)**	10,823
Debtors, prepayments, accrued charges and creditors	**495**	1,060	**534**	500
Tax balances	**436**	555	**434**	430
Carrying value of associates due to dividends received	**1**	10	**-**	-
Interest, fees and commissions receivable and payable	**431**	(54)	**620**	(108)
Assets under operating lease	**(867)**	(1,115)	**(534)**	(2,059)
Other assets and liabilities	**(417)**	(1,866)	**(73)**	(1,200)
Loan assets and balances with related body corporate entities	**(16,832)**	(29,716)	**(19,824)**	(26,763)
Net cash flows generated from operating activities	**(13,472)**	39,539	**(13,612)**	32,070

(iii) Reconciliation of loan capital

	CONSOLIDATED 2023 $m	CONSOLIDATED 2022 $m	COMPANY 2023 $m	COMPANY 2022 $m
Balance at the beginning of the financial year	**6,896**	6,804	**6,896**	6,804
Cash flows:[(3),(4)]				
Issuance	**2,338**	1,405	**2,338**	1,405
Redemption	**-**	(1,101)	**-**	(1,101)
Non-cash changes:				
Foreign currency translation and other movements	**289**	(212)	**289**	(212)
Balance at the end of the financial year	**9,523**	6,896	**9,523**	6,896

(1) Includes $714 million (2022: $375 million) in the Consolidated entity and $127 million (2022: $144 million) in the Company required to be maintained with central banks and other regulatory authorities and balances held in countries where remittance of cash outside the country is subject to certain restrictions and balances held by Consolidated SEs that are restricted from use by the Consolidated Entity.
(2) Amounts excluded from cash and cash equivalents but presented in the Statements of financial position as Cash and bank balances primarily relates to $5,299 million (2022: $3,248 million) (for the Company: $1,357 million, 2022: $2,083 million) of funds received from clients which are segregated from the Consolidated Entity's own funds and other balances of $361 million (2022: $120 million) (for the Company: $240 million, 2022: $87 million) that are not readily available to meet the short-term cash commitments.
(3) During the year ended 31 March 2022, the Consolidated Entity and the Company, issued BCN3 for $655 million. These are perpetual securities which are eligible for conversion into a variable number of Consolidated Entity's ordinary shares on the scheduled mandatory exchange date, provided the exchange conditions are satisfied, unless redeemed, resold or written off earlier. Refer to Note 23 *Loan capital* for details.
(4) During the year ended 31 March 2023, the Consolidated Entity and the Company raised $2,338 million (2022: $750 million) through the issue of Tier 2 loan capital and redeemed $nil million (2022: $1,101 million) of Tier 2 loan capital under fixed repayment obligations.

Note 27
Related party information

Transactions between the Consolidated Entity and the ultimate and immediate parent entities and with other related body corporate entities under common control principally arise from the provision and repayment of funding arrangements, provision of banking and other financial services, provision of management and administration services, facilities and accommodation, the provision of guarantees, restructure of businesses, repayment of capital and distribution of dividends and trading activities including derivative transactions for managing and hedging market risks.

The Master Loan Agreement (MLA) governs the funding and netting arrangements between various subsidiaries and related body corporate entities which are under the common control of MGL and which have acceded to the MLA. The Tripartite Outsourcing Major Services Agreement (TOMSA) governs the provision of intra-group services between subsidiaries and related body corporate entities other than certain excluded entities.

Ultimate and immediate parent entities

The Consolidated Entity's and Company's ultimate parent entity is MGL and the immediate parent entity is Macquarie B.H. Pty Limited (MBHPL). Both MGL and MBHPL are incorporated in Australia. MGL produces consolidated financial statements that are available for public use. MGL as the ultimate parent entity of the Macquarie Group is the head entity of the Australian tax consolidated group. The terms and conditions of this agreement are set out in Note 41(vi) *Taxation*. Amounts receivable from MGL includes amounts receivable by the Company under the tax funding agreement of the tax consolidated group.

Balances outstanding with MGL and MBHPL are included in Due from related body corporate entities or Due to related body corporate entities, as appropriate, separately in the Statements of financial position of the Consolidated Entity and Company except when the parties have the legally enforceable right and the intention to offset.

The following transactions occurred with the ultimate and immediate parent entities during the financial year.

	CONSOLIDATED		COMPANY	
	2023 $'000	2022 $'000	**2023 $'000**	2022 $'000
Interest income	**1,461**	503	**1,436**	495
Interest expense	**(9,579)**	(366)	**(8,818)**	(1)
Fee and commission income	**4,576**	3,753	**544**	561
Dividend paid	**2,749,000**	–	**2,749,000**	–

The following balances and off balance sheet arrangements with the ultimate parent and immediate parent entities were outstanding as at financial year end.

	CONSOLIDATED 2023 $'000	CONSOLIDATED 2022 $'000	COMPANY 2023 $'000	COMPANY 2022 $'000
On Balance Sheet				
Due from related body corporate entities[1]	**717,297**	440,295	**398,129**	247,566
Due to related body corporate entities[2]	**(489,392)**	(271,279)	**(342,134)**	(202,241)
Off Balance Sheet				
Letter of credit	**(18,200)**	(18,321)	**(18,200)**	(18,321)
Guarantees received[3]	**748,703**	363,580	**–**	–

(1) Due from related body corporates primarily represents the amounts receivable by the Consolidated Entity and the Company, in respect of amounts paid in advance for MEREP awards offered to its employees' net of share-based payment expense (refer to Note 41(xxiii) *Performance based remuneration*), loans and receivables as per the terms of the funding arrangements under the MLA and trading-related balances including derivatives designated in hedge accounting relationships.
(2) Due to related body corporates primarily represents the amount payable by the Consolidated Entity and the Company as per the terms of funding arrangements under the MLA, trading-related balances including derivative designated in hedge accounting relationships and payables under other bespoke loans agreements.
(3) Represents Guarantees provided by MGL to counterparties with respect to their exposures to certain subsidiaries.

Note 27
Related party information continued

Subsidiaries

Balances may arise from lending and borrowing activities between the Company and its subsidiaries which are either repayable on demand or may be extended on a term basis and where appropriate may be either subordinated or collateralised. The Company also transacts with subsidiaries for trading activities including derivative transactions to manage and hedge market risks.

All transactions undertaken with subsidiaries are eliminated in the consolidated financial statements. Amounts Due from and Due to subsidiaries are presented separately in the Statements of financial position of the Company except when the parties have the legal right and intention to offset.

A list of notable subsidiaries is set out in Note 14 *Investment in subsidiaries.*

Transaction under common control

During the previous financial year, the Bank Group undertook a reorganisation to meet the requirements of the revised prudential standard APS 222 Associations with Related entities. The reorganisation involved transfer of certain existing assets, legal entities and business activities within the Bank Group. As a result of the reorganisation, the company acquired net assets of $9,178 million from its subsidiaries primarily in the nature of loan and trading assets and also acquired certain subsidiaries at a fair value of $2,916 million. Further the company also disposed of its equity interest in certain subsidiaries with a carrying value of $1,798 million (net of impairment) for a total consideration of $3,255 million resulting in a gain on disposal of $1,404 million. The total consideration paid and received by the Company was settled in cash.

The following other transactions occurred with subsidiaries during the financial year.

	COMPANY	
	2023 $'000	2022 $'000
Interest income	**346,773**	257,358
Interest expense	**(954,860)**	(317,330)
Fee and commission income	**341,920**	171,699
Rental income	**19,163**	19,163
Investment income:		
Dividend (Note 2)	**1,882,685**	3,259,408
Gain on disposal of businesses and subsidiaries	**30,696**	1,404,384
Other income/(expenses)	**49,493**	(24,366)
Fee and commission expenses	**(81,839)**	(79,000)
Other operating expenses	**(2,092,061)**	(1,449,362)

The following balances and off balance sheet arrangements with subsidiaries were outstanding as at financial year end.

On Balance Sheet		
Due from subsidiaries[(1),(2)]	**18,314,168**	23,956,615
Due to subsidiaries[(1)]	**(28,715,915)**	(36,572,457)
Off Balance Sheet		
Guarantees provided[(2),(3)]	**(2,351,506)**	(7,386,785)
Performance related contingencies	**(520)**	(520)
Letter of credit	**(24,614)**	(17,177)
Guarantees received from subsidiaries[(4)]	**3,747,491**	2,664,914

(1) Due from and due to subsidiaries primarily represents loans, receivables and payables presented net as per the terms of the funding arrangements under MLA, payables under bespoke funding agreements, reverse repurchase and repurchase agreements and trading-related balances including derivative designated in hedge accounting relationship.
(2) Include $1,116,231 thousand (2022: 4,143,521 thousand) of guarantees to a subsidiary, Macquarie Bank Europe Limited (MBEL), related to its exposures from certain external counterparties. In support of these guarantees, the Company has deposited a cash collateral of $2,774,523 thousand (2022: 3,363,128 thousand) included in the due from subsidiaries balance above.
(3) Includes guarantees to counterparties with respect to their exposures from certain subsidiaries. These guarantees have a notional value of $10,859,025 thousand (2022: $12,752,961 thousand) with the amount disclosed in the table above being the component of that guarantee value equivalent to the fair value of the underlying risk position at the reporting date. Guarantee exposures reported in table above are also included under Off balance sheet exposures in Note 12 *Expected credit losses* and Note 33.1 *Credit risk.*
(4) The Company's exposures with certain Non-ELE subsidiaries included in amounts due from subsidiaries are guaranteed by a subsidiary, MIFL, for which it has placed cash collateral of $3,749,052 thousand (2022: $2,664,011 thousand) with the Company as per the terms of the guarantee arrangement, which is included in the due to subsidiaries balance above.

Note 27
Related party information continued

Other related body corporate entities

Balances may arise from lending and borrowing activities between the Consolidated Entity and other related body corporate entities which are generally repayable on demand or may be extended on a term basis and where appropriate, may be either subordinated or collateralised.

Balances outstanding with other related parties are presented in due from related body corporate entities or Due to related body corporate entities, as appropriate, separately in the Statements of financial position of the Consolidated Entity and Company except when the parties have the legal right and intention to offset.

The following transactions occurred with other related body corporate entities during the financial year.

	CONSOLIDATED		COMPANY	
	2023 $'000	2022 $'000	**2023 $'000**	2022 $'000
Interest income	**10,223**	6,568	**9,791**	6,280
Interest expense	**(333,466)**	(15,689)	**(266,230)**	(14,057)
Fee and commission income/(expense)[1]	**1,271,948**	919,682	**(61,302)**	(126,313)
Other income/(expenses)	**35,992**	(383)	**33,850**	(1,966)
Fee and commission expenses	**-**	(28,323)	**-**	(16,000)
Other operating expenses	**(9,527)**	(36,000)	**(1,037)**	(4,067)

The following balances and off balance sheet arrangements with other related body corporate entities were outstanding at the reporting date.

	CONSOLIDATED 2023 $'000	CONSOLIDATED 2022 $'000	COMPANY 2023 $'000	COMPANY 2022 $'000
On Balance Sheet				
Due from other related body corporate entities[2]	**3,703,439**	2,984,219	**3,488,390**	2,706,604
Due to other related body corporate entities[2]	**(14,152,625)**	(11,365,118)	**(12,032,267)**	(10,001,599)
Off Balance Sheet				
Guarantees provided	**(2,236)**	(1,328)	**(1,562)**	(1,328)
Undrawn credit facilities	**-**	(20,000)	**-**	(20,000)
Letter of credit	**(90,297)**	(138,213)	**(90,297)**	(138,213)
Performance related contingencies[3]	**(208,283)**	(512,469)	**(208,283)**	(512,469)
Guarantees received[4]	**8,036,990**	5,939,276	**8,010,341**	5,805,743

(1) Includes service fees earned by the service entities from the Non-Bank Group.
(2) Due from and due to related body corporates primarily represents loans, receivables and payables as per the terms of the funding arrangements under MLA, payables under bespoke funding agreements and trading-related balances including derivative designated in hedge accounting relationship.
(3) Represents performance related contingent liability in favour of MGL on behalf of MFHPL for which the Company has received securities as collateral from a related group entity, Macquarie GT Holdings Pty Limited (MGTH).
(4) The Company's exposures with certain Non-ELE subsidiaries and certain external counterparties are guaranteed by MFHPL, for which MFHPL has placed cash collateral of $6,286,483 thousand (2022: $4,952,916 thousand) with the Company as per the terms of the guarantee arrangement, which is included in the due to other related body corporate entities balance above. In addition to this, the Company's and Consolidated Entity's exposures with certain Non-ELE Non-Bank group entities included in amounts due from related body corporate entities and off balance sheet exposure are guaranteed by MGTH, for which it has placed non-cash collateral of $1,172,410 thousand (2022: $852,257 thousand) with the Company as per the terms of the guarantee arrangement.

Note 27
Related party information continued

Associates and joint ventures

The Consolidated Entity provides a range of services to its associates and joint ventures, including the provision of corporate advisory and management services. Other dealings include lending and borrowing activities. Loans are generally extended on a term basis and, where appropriate, are either subordinated or collateralised. Other transactions with associates and joint ventures may involve the sale of financial investments or the Consolidated Entity's interest in subsidiaries, associates or joint ventures.

During the financial year, the following amounts of income/(expense) resulted from transactions with associates and joint ventures.

	CONSOLIDATED		COMPANY	
	2023 $'000	2022 $'000	**2023 $'000**	2022 $'000
Interest income	**7,981**	12,028	**3,785**	12,028
Fee and commission income	**6,268**	10,326	**4,674**	9,390
Other income	**4,470**	1,619	**2**	1,619

Dividends and distributions of $1,233 thousand (2022: $10,697 thousand) were received from the Consolidated Entity's associates and joint ventures. Under the equity method of accounting, these amounts are not included as income but are recorded as a reduction from the carrying amount of the investment.

The following balances and off balance sheet arrangements with associates and joint ventures were outstanding as at financial year end (these exclude amounts which in substance form part of the Consolidated Entity's net investment in associates and joint ventures).

	CONSOLIDATED 2023 $'000	CONSOLIDATED 2022 $'000	COMPANY 2023 $'000	COMPANY 2022 $'000
On Balance Sheet				
Amounts receivable	**57,792**	379,861	**36,371**	375,200
Amounts payable	**(29,116)**	(11,516)	**(21,744)**	(5,566)
Off Balance Sheet				
Guarantees provided	**–**	(37,392)	**–**	(37,392)
Undrawn commitments	**(67,553)**	(45,613)	**(44,149)**	(45,613)

Note 28
Key management personnel disclosure

Key management personnel (KMP)

The following persons were Directors of the Company during the financial years ended 31 March 2023 and 31 March 2022, unless indicated otherwise.

Executive Voting Directors

S.R. Wikramanayake	Macquarie Group CEO
S.D. Green	Macquarie Bank CEO (appointed to be a member of the Executive Committee effective from 1 July 2021)

Non-Executive Directors

G.R. Stevens AC	Chairman (became Chairman effective 10 May 2022)
J.R. Broadbent AC	
P.M. Coffey	
M.J. Coleman[(1)]	
M.A. Hinchliffe	(appointed effective 1 March 2022)
R.J. McGrath	
M. Roche	
I.M. Saines[(2)]	(appointed effective 1 June 2022)
N.M. Wakefield Evans AM	

Former Non-Executive Directors

G.M. Cairns	(retired effective 7 May 2021)
D.J. Grady AO	(retired effective 24 February 2022)
P.H. Warne[(3)]	(retired effective 9 May 2022)

In addition to the Executive Voting Directors listed above, the following persons also had authority and responsibility for planning, directing and controlling the activities of MBL during the financial years ended 31 March 2023 and 31 March 2022, unless otherwise indicated.

Current Executives[(4)]

G.N. Bruce	GGC, Head of LGG (appointed to the Executive Committee effective from 2 March 2022)
A. Cassidy	CRO, Head of RMG (appointed to the Executive Committee effective from 1 January 2022)
A.H. Harvey	CFO, Head of FMG
N. O'Kane	Head of CGM
N. Sorbara	COO, Head of COG
G.C. Ward	Deputy Managing Director and Head of BFS

Former Executives

M.J. Reemst	Former Macquarie Bank CEO (ceased to be a member of the Executive Committee effective from 1 July 2021)
P.C. Upfold	Former CRO, Head of RMG (ceased to be a member of the Executive Committee effective from 31 December 2021)

The remuneration arrangements for all of the persons listed above are described on pages 42 to 66 of the Remuneration Report, contained in the Directors' Report.

(1) Mr Coleman ceased to be a member of the MGL Board on 28 July 2022 and became a Bank-only Non-Executive Director (BOND) on 29 July 2022.
(2) Mr Saines was appointed to the MBL Board as a Bank-only Non-Executive Director (BOND) on 1 June 2022.
(3) Mr Warne retired as a Director and Chairman of the MGL and MBL Boards on 9 May 2022.
(4) Except where indicated otherwise, all of the Executives, as well as the CEO were members of the Executive Committee as at 5 May 2023.

Note 28
Key management personnel disclosure continued

Key management personnel remuneration

The following table details the aggregate remuneration for KMP.

	SHORT-TERM EMPLOYEE BENEFITS				LONG-TERM EMPLOYEE BENEFITS	SHARE-BASED PAYMENTS		
	Salary and fees (including superannuation) $	Performance related remuneration[1] $	Other benefits $	Total short-term employee benefits $	Restricted profit share including earnings on restricted profit share[2] $	Equity awards[3] $	PSUs[4] $	Total remuneration $
Executive remuneration								
2023	**4,410,993**	**29,086,491**	**–**	**33,497,484**	**10,808,015**	**33,704,377**	**9,553,849**	**87,563,725**
2022	3,944,849	24,118,688	–	28,063,537	6,502,880	33,188,284	9,969,681	77,724,382
Non-Executive remuneration								
2023	**2,328,655**	**–**	**–**	**2,328,655**	**–**	**–**	**–**	**2,328,655**
2022	1,822,877	–	9,000	1,831,877	–	–	–	1,831,877

Loans to KMP and their related parties

Details of loans provided by the Consolidated Entity to KMP and their related parties are disclosed in aggregate in the following table.

Total for KMP and their related parties[5]	Opening balance as at 1 Apr $'000	Additions during the year[6] $'000	Interest charged $'000	Repayments during the year[7] $'000	Write-downs $'000	Closing balance as at 31 Mar[8] $'000
2023	**17,210**	**61**	**343**	**(1,503)**	**–**	**16,111**
2022	11,729	11,196	140	(5,855)	–	17,210

(1) The cash portion of each KMP's profit share allocation for the reporting period when they were a KMP.
(2) The amount of the retained profit share held via the DPS plan including earnings on notional investments from retained profit share in prior financial years.
(3) The current year amortisation for equity awards calculated as described in 41(xxiii) *Performance based remuneration*.
(4) The current year amortisation for PSUs calculated as described in Note 41(xxiii) *Performance based remuneration*. The current year expense is reduced for previously recognised remuneration expense where performance hurdles have not been met, have been partially met or are not expected to be met.
(5) All loans provided by Macquarie to KMP are made in the ordinary course of business on an arm's length basis and are entered into under normal terms and conditions consistent with other customers and employees. There have been no write-downs or allowances for doubtful debts.
(6) Or loan held as at date of appointment of new KMP.
(7) Or loan held as at date ceased to be a KMP.
(8) Number of persons included in the aggregate as at 31 March 2023: 5 (31 March 2022: 6).

Note 29
Employee equity participation

MEREP

MBL participates in its ultimate parent company's, Macquarie Group Limited (MGL), share based compensation plans, being the Macquarie Group Employee Retained Equity Plan (MEREP). In terms of this plan, awards are granted by MGL to qualifying employees for delivery of MGL shares.

Award types under the MEREP

Restricted Share Units (RSUs)

An RSU is a beneficial interest in a MGL ordinary share held on behalf of a MEREP participant by the plan trustee (Trustee).

The participant is entitled to receive dividends on the share and direct the Trustee how to exercise voting rights of the share. The participant also has the right to request the release of the share from the MEREP Trust, subject to the vesting and forfeiture provisions of the MEREP.

	NUMBER OF RSU AWARDS	
	2023	2022
RSUs on issue at the beginning of the financial year	**6,227,261**	6,241,630
Granted during the financial year	**2,418,853**	1,786,608
Forfeited during the financial year	**(54,635)**	(79,965)
Vested RSUs withdrawn or sold from the MEREP during the financial year	**(1,709,322)**	(1,700,796)
Net transfers from/(to) related body corporate entities(1)	**9,401**	(20,216)
RSUs on issue at the end of the financial year	**6,891,558**	6,227,261
RSUs vested and not withdrawn from the MEREP at the end of the financial year	**1,262**	550

The weighted average fair value of the RSU awards granted during the financial year was $164.99 (2022: $152.21).

Deferred Share Units (DSUs)

A DSU represents the right to receive on exercise of the DSU either a MGL share held in the Trust or a newly issued MGL share (as determined by MGL in its absolute discretion) for no cash payment, subject to the vesting and forfeiture provisions of the MEREP. A MEREP participant holding a DSU has no right or interest in any share until the DSU is exercised. MGL may issue shares to the Trustee or direct the Trustee to acquire shares on-market, or via a share acquisition arrangement for potential future allocations to holders of DSUs.

Generally, where permitted by law, DSUs will provide for cash payments in lieu of dividends paid on MGL ordinary shares before the DSU is exercised. Further, the number of shares underlying a DSU will be adjusted upon any bonus issue or other capital reconstruction of MGL in accordance with the ASX Listing Rules, so that the holder of a DSU does not receive a benefit that holders of the MGL's shares do not generally receive. These provisions are intended to provide the holders of DSUs, as far as possible, with the same benefits and risks as holders of RSUs. However, holders of DSUs will have no voting rights with respect to any underlying MGL ordinary shares.

DSUs will only be offered in jurisdictions where legal or tax rules make the grant of RSUs impractical, or where PSUs are structured as DSUs (see PSUs). DSUs have been granted with an expiry period of up to nine years.

	NUMBER OF DSU AWARDS	
	2023	2022
DSUs on issue at the beginning of the financial year	**1,211,718**	1,122,300
Granted during the financial year	**392,958**	309,897
Forfeited during the financial year	**(7,845)**	(8,576)
Exercised during the financial year	**(174,200)**	(241,711)
Net transfers from related body corporate entities(1)	**1,496**	29,808
DSUs on issue at the end of the financial year	**1,424,127**	1,211,718
DSUs exercisable at the end of the financial year	**590,421**	451,390

The weighted average fair value of the DSU awards granted during the financial year was $155.92 (2022: $144.10).

(1) Net transfers from related body corporate entities during the year includes transfers relating to the transfer of employees within Macquarie group entities.

Note 29
Employee equity participation continued

Award types under the MEREP continued

Performance Share Units (PSUs)

All PSUs currently on issue are structured as DSUs with performance hurdles related to MGL's performance that must be met before the underlying share or cash equivalent (as the case may be) will be delivered. PSU holders have no right to dividend equivalent payments before the PSUs vest.

	NUMBER OF PSU AWARDS	
	2023	2022
PSUs on issue at the beginning of the financial year	**514,318**	654,839
Granted during the financial year	**124,114**	91,253
Exercised during the financial year	**(199,278)**	(108,745)
Expired during the year	**–**	(123,029)
PSUs on issue at the end of the financial year	**439,154**	514,318
PSUs exercisable at the end of the financial year	**–**	14,278

The weighted average fair value of the PSU awards granted during the financial year was $156.54 (2022: $134.04).

Participation in the MEREP is currently provided to the following Eligible Employees:

- Executive Directors with retained Directors' Profit Share (DPS) from 2013 onwards, a proportion of which is allocated in the form of MEREP awards (Retained DPS Awards)
- staff other than Executive Directors with retained profit share above a threshold amount (Retained Profit Share Awards) and staff who were promoted to Associate Director, Division Director or Executive Director, who received a fixed Australian dollar value allocation of MEREP awards (Promotion Awards)
- Macquarie Bank staff with retained commission (Commission Awards)
- new Macquarie Bank staff who commence at Associate Director, Division Director or Executive Director level and are awarded a fixed Australian dollar value (New Hire Awards)
- members of the MBL Executive Committees who are eligible for PSUs (PSU awards)
- in limited circumstances, Macquarie Bank staff may receive an equity grant instead of a remuneration or consideration payment in cash. Current examples include individuals who become employees of Macquarie Bank upon the acquisition of their employer by a Macquarie entity or who receive an additional award at the time of joining Macquarie (also referred to above as New Hire Awards).

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 29

Employee equity participation continued

Award types under the MEREP continued

Vesting periods are as follows:

Award type	Level	Vesting
Retained Profit Share Awards and Promotion Awards	Below Executive Director	1/3rd in the 2nd, 3rd and 4th year following the year of grant(1)
Retained DPS Awards	Executive Committee members and Designated Executive Directors	1/5th in the 3rd, 4th, 5th, 6th and 7th year following the year of grant(2)
Retained DPS Awards	All other Executive Directors	1/3rd in the 3rd, 4th and 5th year following the year of grant(2)
PSU Awards granted in relation to 2016 to 2019	Executive Committee members	50% in the 3rd and 4th years following the year of grant(3)
PSU Awards granted in relation to 2020 and following years	Executive Committee members	100% in the 4th year following the year of grant(3)
Commission Awards	Below Executive Director	1/3rd in the 2nd, 3rd and 4th year following the year of grant(1)
New Hire Awards	All Director-level staff	1/3rd in the 2nd, 3rd and 4th anniversaries of the date of allocation(1)

In limited cases, the invitation or application form for awards may set out a different vesting period, in which case that period will be the vesting period for the award. For example, staff in jurisdictions outside Australia may have a different vesting period due to local regulatory requirements.

For Retained Profit Share awards representing 2022 retention, the allocation price was the weighted average price of the shares acquired for the 2022 purchase period, which was 16 May 2022 to 21 June 2022. That price was calculated to be $168.81 (2021 retention: $151.73).

(1) Vesting will occur during an eligible staff trading window.
(2) Vesting will occur during an eligible staff trading window. If an Executive Director has been on leave without pay (excluding leave to which the Executive Director may be eligible under local laws) for 12 months or more, the vesting period may be extended accordingly.
(3) Subject to achieving certain performance hurdles.

Note 29
Employee equity participation continued

Performance Share Units (PSUs)

PSUs will only be released or become exercisable upon the achievement of certain performance hurdles related to MGL's performance. Only members of the MBL Executive Committees are eligible to receive PSUs. For the PSUs allocated to Executive Committee Members, two performance hurdles have been determined and each will apply individually to 50% of the total number of PSUs awarded. Hurdles are periodically reviewed by the Board Remuneration Committee (BRC) to ensure they continue to align the interests of staff and shareholders and provide a challenging but meaningful incentive to Executive Committee members. The BRC considers historical and forecast market data, the views of corporate governance bodies, shareholders and regulators as well as market practice. No change has been made to the hurdles for this financial year.

The hurdles are outlined below.

Performance hurdle 1

Hurdle	Reference group
50% of the PSUs based solely on the relative average annual return on ordinary equity (ROE) over the vesting period compared to a reference group of global financial institutions. A sliding scale applies with 50% becoming exercisable above the 50th percentile and 100% vesting at the 75th percentile.	The current reference group comprises Barclays PLC, Bank of America Corporation, Citigroup Inc., Deutsche Bank AG, Goldman Sachs Group Inc., JPMorgan Chase & Co., Lazard Limited, Morgan Stanley and UBS AG.[1]

Performance hurdle 2

Hurdle	Required result
50% of the PSUs based solely on the compound annual growth rate (CAGR) in earnings per share (EPS) over the vesting period.	A sliding scale applies with 50% becoming exercisable at EPS CAGR of 7.5% and 100% at EPS CAGR of 12%. For example, if EPS CAGR were 9.75%, 75% of the relevant awards would become exercisable.

Under both performance hurdles, the objective is examined once only. Testing occurs annually on 30 June immediately before vesting on 1 July, based on the most recent financial year-end results available. To the extent that a condition is not met when examined, the PSUs due to vest will not be exercisable upon vesting, resulting in no benefit to Executive Committee members.

(1) Given the recent government-supported acquisition of Credit Suisse Group by UBS AG, Credit Suisse Group has been removed from the international reference group for PSU allocation in respect of FY2023 onwards. The BRC have approved Citigroup Inc. as a replacement, taking into account the markets in which it operates and the diversification of its business segments.

Note 29
Employee equity participation continued

Assumptions used to determine fair value of MEREP awards

RSUs and DSUs are measured at their grant dates based on their fair value[1] and for each PSU, the awards expected to vest are measured on the basis of the assumptions below. This amount is recognised as an expense evenly over the respective vesting periods.

RSUs, DSUs and PSUs relating to the MEREP plan for Executive Committee members have been granted in the current financial year in respect of the 2022 performance. The accounting fair value of each of these grants is estimated using the MGL's share price on the date of grant and for each PSU also incorporates a discounted cash flow method using the following key assumptions:

- interest rate to maturity: 3.13% per annum
- expected vesting dates of PSUs: 1 July 2026
- dividend yield: 3.30% per annum.

While RSUs DSUs, and PSUs (for Executive Committee members) for FY2023 will be granted during FY2024, the Company begins recognising an expense for these awards (based on an initial estimate) from 1 April 2022 related to these future grants. The expense is estimated using the estimated MEREP retention for FY2023 and applying the amortisation profile to the retained amount.

For PSUs, the estimate also incorporates an interest rate to maturity of 4.24% per annum, expected vesting date of PSUs of 1 July 2027, and a dividend yield of 3.28% per annum. In the following financial year, the Consolidated Entity will adjust the accumulated expense recognised for the final determination of fair value for each RSU, DSU and PSU when granted and will use this validation for recognising the expense over the remaining vesting period.

The Consolidated Entity annually revises its estimates of the number of awards (including those delivered through MEREP) that are expected to vest. It recognises the impact of the revision to original estimates, if any, in the employment expenses in the income statement.

For the financial year ended 31 March 2023, compensation expense relating to the MEREP totalled $414,674 thousand (2022: $322,413 thousand).

Employee Share Plan

MBL also participates in MGL's Macquarie Group Employee Share Plan (ESP) whereby each financial year eligible employees are offered up to $1,000 worth of fully paid MGL ordinary shares for no cash consideration.

Shares allocated under the ESP cannot be sold until the earlier of three years after allocation or the time when the participant is no longer employed by MGL or a subsidiary of MGL. In all other respects, shares allocated rank equally with all other fully paid ordinary shares then on issue.

The latest offer under the ESP was made during November 2022. A total of 2,052 (2022: 1,746) staff participated in this offer. On 30 November 2022, the participants were each allocated 5 (2022: 4) fully paid ordinary shares based on the offer amount of $1,000 and the average market share price of $178.23 (2022: $202.00), resulting in a total of 10,260 (2022: 6,984) shares being allocated. The shares were allocated to staff for no cash consideration. The aggregate value of the shares allocated was deducted from staff profit share and commissions.

For the financial year ended 31 March 2023, compensation expense relating to the ESP totalled $1,840 thousand (2022: $1,411 thousand).

Other plans

MBL operates other local share-based compensation plans, none of which, individually or in aggregate are material.

(1) For employees categorised as Material Risk Takers who are required to comply with the European Banking Authority Guidelines on the CRD IV and CRD V remuneration requirements, the fair value of the awards granted for performance periods after 1 April 2019 has been adjusted to take into account the prohibition of dividends on unvested awards.

Note 30
Contingent liabilities and commitments

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Credit commitments				
Letters of credit and guarantees(1)	**2,156**	1,909	**4,464**	9,313
Undrawn credit facilities and debt commitments(2)	**20,378**	20,453	**16,963**	16,577
Total credit commitments	**22,534**	22,362	**21,427**	25,890
Other contingencies and commitments				
Asset developments and purchase commitments	**1,476**	1,086	**925**	1,080
Performance-related contingencies	**677**	971	**667**	972
Total other contingencies and commitments	**2,153**	2,057	**1,592**	2,052
Total contingent liabilities and commitments	**24,687**	24,419	**23,019**	27,942

Note 31
Structured entities

A Structured Entity (SE) is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. SEs are generally established with restrictions on their ongoing activities in order to achieve narrow and well-defined objectives. SEs are classified as subsidiaries and are consolidated when control exists.

The Consolidated Entity engages with SEs for securitisation, asset-backed financing and structured financing arrangements in order to diversify its sources of funding for asset origination and capital efficiency purposes. The Consolidated Entity also engages with SEs when providing fund administration and other fiduciary activities. The Consolidated Entity's involvement with SEs is primarily of the following nature.

Type	Details
Securitisation	Securitisations involve transferring assets into a vehicle that sells beneficial interests to investors through the issue of debt and equity notes with varying levels of subordination. The notes are collateralised by the assets transferred to these vehicles and pay a return based on the returns of those assets, with residual returns paid to the most subordinated investor. These vehicles are created for securitising assets, including mortgages, finance leases, and credit card receivables of the Consolidated Entity or of its clients. The Consolidated Entity also establishes SEs on behalf of customers to securitise their loans or receivables and may manage these securitisation vehicles or provide liquidity or other support. The Consolidated Entity may serve as a sponsor, servicer, underwriter, liquidity provider, derivative counterparty, purchaser of notes and/or purchaser of residual income units. The Consolidated Entity may also provide redraw facilities or loan commitments to securitisation vehicles.
Asset-backed financing	Asset-backed vehicles are used to provide tailored lending for the purchase or lease of assets transferred by the Consolidated Entity or its clients. The assets are normally pledged as collateral to the lenders. The Consolidated Entity engages in raising finance for assets such as vessels, electronic and IT equipment.
Funds administration activities	The Consolidated Entity conducts fund administration and other fiduciary activities as responsible entity, trustee, custodian, of funds, trusts including superannuation and approved deposit fund, wholesale and retail trusts. The Consolidated entity's interests in these funds primarily represents fees receivables for the services.
Structured financing and others arrangements	Includes structured entities established to raise financing and fulfil obligations for prepaid commodity delivery contracts. The Consolidated Entity has contractually guaranteed the performance obligation under these arrangements.

(1) It is not practicable to ascertain the timing of any outflow and the possibility of any reimbursement related to these contingent liabilities.
(2) Undrawn credit facilities include fully or partially undrawn commitments against which clients can borrow money under defined terms and conditions. During the financial year, the Consolidated Entity has updated its accounting policy regarding its undrawn commitments for certain retail banking products which despite being revocable are considered to be exposed to credit risk. The gross exposure of these undrawn commitments is $13,723 million (2022: 14,643 million) for the Consolidated Entity and $10,460 million (2022: $10,930 million) for the Company is disclosed under Undrawn credit facilities and debt commitments in the current period and comparative information has been re-presented.

Note 31
Structured entities continued

The following table presents the carrying value and maximum exposure to loss (before the benefit of collateral and credit enhancements) of the Consolidated Entity's interests in unconsolidated SEs.

	CONSOLIDATED 2023				CONSOLIDATED 2022			
	Securitisations $m	Asset-backed financing $m	Structured Financing and others arrangements $m	Total $m	Securitisations $m	Asset-backed financing $m	Structured Financing and others arrangements $m	Total $m
Maximum exposure to loss								
Carrying value of assets:								
Loan assets	**1,143**	**1,895**	**3,869**	**6,907**	1,832	1,788	3,617	7,237
Financial investments	**2,134**	**–**	**–**	**2,134**	1,496	4	–	1,500
Margin money and settlement assets	**251**	**–**	**–**	**251**	593	–	–	593
Derivative assets	**229**	**–**	**–**	**229**	299	–	–	299
Trading assets	**132**	**–**	**–**	**132**	64	–	–	64
Total carrying value of assets[(1)]	**3,889**	**1,895**	**3,869**	**9,653**	4,284	1,792	3,617	9,693
Undrawn commitments	**8**	**193**	**156**	**357**	30	50	154	234
Total maximum exposure to loss	**3,897**	**2,088**	**4,025**	**10,010**	4,314	1,842	3,771	9,927

Additionally, as part of its funds administration activities the Consolidated Entity has interests in certain funds primarily in the form of fee receivables representing the Consolidated Entity's maximum exposure to loss which is disclosed in Note 10 *Held for sale and other assets*.

In respect of the Consolidated Entity's loan assets' exposure in securitisation, asset-backed financing entities and structured financing, the total size of the unconsolidated SEs is $44,114 million (2022: $54,951 million). Size represents either the total assets of the SE (measured either at amortised cost excluding impairments or fair values if readily available); outstanding notional of issued notes or the principal amount of liabilities if there is nominal equity. Size is based on the latest available information with the Consolidated Entity.

The Consolidated Entity's exposure to securitisation entities in the nature of trading assets, margin money, derivatives and financial investments are acquired for the purpose of trading and liquidity management. These exposures are typically managed under market risk limits described in Note 33.3 *Market risk*. For these reasons, information on the size and structure for these SEs is not considered meaningful for understanding the related risks, and have not been presented in the table above.

(1) Includes non-investment grade interests of $540 million (2022: $721 million) in securitisation activities, $1,262 million (2022: $1,232 million) in asset-backed financing activities and $474 million (2022: $450 million) in Structured Financing and other arrangements.

Note 32
Hedge accounting

Hedging strategy

The use of derivative and non-derivative instruments to economically hedge non-traded positions potentially gives rise to income statement volatility as a result of mismatches in the accounting treatment between the derivative and non-derivative instruments and the related exposure. The Consolidated Entity's objective is to reduce the risk of volatility in earnings. This volatility may be managed by allowing hedges to naturally offset one another or, where the earnings volatility exceeds pre-defined thresholds, hedge accounting is considered.

Hedging instruments

Detail on hedging instruments, the nature of hedged risks, as well as the notional and the carrying amount of derivative financial instruments and, in the case of net investment hedges, the notional of foreign currency denominated borrowings, for each type of hedge relationship, is shown in the respective sections. The maturity profile for the hedging instruments' notional amounts are reported based on their contractual maturity. Where a cross currency swap has been dual designated in both a cash flow and a fair value hedge, the notional is shown more than once. Increases in notional profiles of hedging instruments are presented as negative figures, with decreases and maturities presented as positive figures.

Hedging ineffectiveness

In the case of a fair value hedge, hedge ineffectiveness is the extent to which the changes in the fair value of the hedging instrument differ to that of the hedged item. In the case of a cash flow hedge, hedge ineffectiveness is the extent to which the change in the fair value of the hedging instrument exceeds, in absolute terms, that of the hedged item. In the case of net investment hedge relationships, hedge ineffectiveness is the extent to which the change in the carrying amount of foreign currency denominated borrowings and foreign exchange contracts attributable to the change in exchange rates exceeds, in absolute terms, that of the hedged item. Sources of hedge ineffectiveness primarily arise from basis and timing differences between the hedged items and hedging instruments and designating existing derivatives with a non-zero fair value as hedging instruments. Hedge ineffectiveness is reported in net trading income in the income statement.

Note 32
Hedge accounting continued

Cash flow hedges

The cash flow hedge reserve, representing the effective portion of the movements in the hedging instrument, is disclosed in Note 25(i) *Reserves.* Changes in this reserve are reported in the Consolidated Entity's Statements of comprehensive income. The cumulative gains and losses remaining in the cash flow hedge reserve for hedging relationships that have ceased, but for which the hedged cash flows are still expected to occur are $1 million gain (2022: $1 million loss) for the Consolidated Entity and $1 million gain (2022: $1 million loss) for the Company. These amounts will be reclassified to the income statement as and when the hedged item affects the income statement.

Hedging instruments

		MATURITY ANALYSIS PER NOTIONAL				
Instrument type	Risk category	Less than 3 months $m	3 to 12 months $m	1 to 5 years $m	Over 5 years $m	Total $m
						CONSOLIDATED 2023
Derivative assets						
Cross currency swaps	Foreign exchange	**(8)**	**832**	**1,388**	**1,007**	**3,219**
Interest rate swaps	Interest rate	**424**	**384**	**507**	**614**	**1,929**
Derivative liabilities						
Cross currency swaps	Foreign exchange	**–**	**–**	**143**	**–**	**143**
Interest rate swaps	Interest rate	**48**	**152**	**42**	**–**	**242**
Borrowings						
Foreign currency denominated borrowings	Foreign exchange	**–**	**–**	**254**	**–**	**254**
						CONSOLIDATED 2022
Derivative assets						
Cross currency swaps	Foreign exchange	(14)	308	1,043	574	1,911
Interest rate swaps	Interest rate	296	345	898	218	1,757
Derivative liabilities						
Cross currency swaps	Foreign exchange	–	–	152	444	596
Interest rate swaps	Interest rate	609	(30)	515	445	1,539

		CONSOLIDATED CARRYING AMOUNT			
		2023		2022	
Instrument type	Risk category	Asset $m	Liability $m	Asset $m	Liability $m
Cross currency swaps	Foreign exchange	**477**	**30**	190	28
Interest rate swaps	Interest rate	**110**	**2**	21	30
Foreign currency denominated borrowings	Foreign exchange	**–**	**188**	–	–

Note 32
Hedge accounting continued

		MATURITY ANALYSIS PER NOTIONAL				
Instrument type	Risk category	Less than 3 months $m	3 to 12 months $m	1 to 5 years $m	Over 5 years $m	Total $m
						COMPANY 2023
Derivative assets						
Cross currency swaps	Foreign exchange	**(8)**	**832**	**413**	**1,007**	**2,244**
Interest rate swaps	Interest rate	**424**	**384**	**507**	**614**	**1,929**
Derivative liabilities						
Cross currency swaps	Foreign exchange	**–**	**–**	**143**	**–**	**143**
Interest rate swaps	Interest rate	**–**	**152**	**42**	**–**	**194**
						COMPANY 2022
Derivative assets						
Cross currency swaps	Foreign exchange	(14)	308	1,043	574	1,911
Interest rate swaps	Interest rate	296	345	898	218	1,757
Derivative liabilities						
Cross currency swaps	Foreign exchange	–	–	152	444	596
Interest rate swaps	Interest rate	609	(30)	463	445	1,487

		COMPANY CARRYING AMOUNT			
		2023		2022	
Instrument type	Risk category	**Asset $m**	**Liability $m**	Asset $m	Liability $m
Cross currency swaps	Foreign exchange	**387**	**30**	190	28
Interest rate swaps	Interest rate	**110**	**2**	21	27

Note 32
Hedge accounting continued

Hedge ineffectiveness

In the case of cash flow hedge relationships, hedge ineffectiveness is the extent to which the change in the fair value of the hedging instrument exceeds, in absolute terms, that of the hedged item.

		GAIN/(LOSS) ON HEDGING INSTRUMENT		GAIN/(LOSS) ON HEDGED ITEM		HEDGE INEFFECTIVENESS GAIN/(LOSS)	
Hedging instruments	Risk category	2023 $m	2022 $m	2023 $m	2022 $m	2023 $m	2022 $m
							CONSOLIDATED
Cross currency swaps	Foreign exchange	**1**	16	**1**	(16)	**2**	–
Foreign currency denominated borrowings	Foreign exchange	**(9)**	–	**9**	–	**–**	–
Interest rate swaps	Interest rate	**110**	116	**(105)**	(114)	**5**	2
Total		**102**	132	**(95)**	(130)	**7**	2
							COMPANY
Cross currency swaps	Foreign exchange	**9**	16	**(7)**	(16)	**2**	–
Interest rate swaps	Interest rate	**108**	95	**(105)**	(95)	**3**	–
Total		**117**	111	**(112)**	(111)	**5**	–

Hedge accounting executed rates

The following table shows the executed rates for the most significant hedging instruments designated in cash flow hedges.

		CONSOLIDATED		COMPANY	
Hedging instruments	Currency pair/currency	2023	2022	2023	2022
Cross currency swaps	AUD/EUR	**0.68**	0.68	**0.68**	0.68
	USD/GBP	**0.66**	0.66	**0.66**	0.66
	AUD/CHF	**0.72**	0.72	**0.72**	0.72
	GBP/CHF	**1.46**	1.46	**1.46**	1.46
	AUD/NOK	**5.88**	5.88	**5.88**	5.88
Interest rate swaps	AUD	**0.13%–5.58%**	0.06%–5.58%	**0.13%–5.58%**	0.06%–5.58%
	GBP	**0.97%–3.48%**	0.97%–2.13%	**0.97%–3.48%**	0.97%–2.13%

Note 32
Hedge accounting continued

Net investment in foreign operation hedges

The Consolidated Entity's net investment in foreign operations (NIFO) changes as a result of earnings, dividends, other capital-related events and changes in the Consolidated Entity's group structure as a result of internal restructures. The risk of changes in the NIFO for movements in foreign exchange rates is hedged by the Consolidated Entity through the use of a combination of derivatives, foreign currency borrowings and other balance sheet items. Refer to Note 33.3 *Market risk:* Non-traded market risk for further information on the Consolidated Entity's risk management strategy.

In order to reflect the Consolidated Entity's risk management strategy, hedge accounting is applied where changes in the derivatives and foreign denominated borrowings are recognised, together with the related foreign currency translation reserve, in the Consolidated Entity's other comprehensive income and is subsequently released to the income statement when the foreign operation is disposed of. Hedge ineffectiveness, if any is recognised in the income statement. Given that the Consolidated Entity's NIFO frequently changes, the hedge designations are reviewed on a monthly basis or more frequently where required.

		CARRYING AMOUNT			
		ASSET		LIABILITY	
Hedging instrument	Risk category	2023 $m	2022 $m	2023 $m	2022 $m
					CONSOLIDATED
Foreign exchange contracts and other foreign currency denominated balance sheet items	Foreign exchange	266	80	37	38
Foreign currency denominated borrowings(1)	Foreign exchange	–	–	11,630	8,616
					COMPANY
Foreign exchange contracts and other foreign currency denominated balance sheet items	Foreign exchange	127	54	38	13
Foreign currency denominated borrowings(1)	Foreign exchange	–	–	4,415	2,642

		NOTIONAL AMOUNT			
		ASSET		LIABILITY	
Hedging instrument	Risk category	2023 $m	2022 $m	2023 $m	2022 $m
					CONSOLIDATED
Foreign exchange contracts and other foreign currency denominated balance sheet items(2)	Foreign exchange	2,364	1,779	886	1,333
Foreign currency denominated borrowings	Foreign exchange	–	–	11,555	9,188
					COMPANY
Foreign exchange contracts and other foreign currency denominated balance sheet items(2)	Foreign exchange	1,548	1,058	747	769
Foreign currency denominated borrowings	Foreign exchange	–	–	4,382	3,291

In order to hedge the currency exposure of certain net investment in foreign operations, the Consolidated Entity jointly designates both forward exchange derivative contracts (from the currency of the underlying foreign operation to USD) and foreign denominated debt issued (from USD to AUD). As a result, the notional value of hedging instruments presented by the Consolidated Entity of $14,805 million (2022: $12,300 million) and Company of $6,677 million (2022: $5,118 million) represents the notional of both the derivative hedging instrument and the debt issued and hence exceeds the $11,466 million (2022: $9,205 million) and $4,286 million (2022: $3,284 million) notional of the underlying hedged component of the Consolidated Entity's and Company's respective net investment in foreign operations.

Hedge ineffectiveness is the extent to which the absolute change in either the fair value of the derivative or the carrying amount of foreign currency denominated borrowings attributable to the change in exchange rates exceeds that of the hedged item. There was no ineffectiveness recognised in the income statement by the Consolidated Entity or the Company in the current year (2022: $nil).

(1) The carrying amount of foreign currency denominated borrowings includes amounts of $80 million and $nil (2022: $369 million and $nil) for the Consolidated Entity and the Company which are disclosed in the respective Statements of financial position as Due to other related body corporate entities.
(2) Where the fair value of the derivative is positive/(negative), the notional of the derivative has been similarly included in the table as an asset/(liability).

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 32

Hedge accounting continued

Fair value hedges

The fair value attributable to the hedged risk is recognised as a fair value adjustment to the hedged item on the balance sheet. In an effective fair value hedge relationship, movements in this fair value adjustment are largely offset by movements in the fair value of the hedging instrument. Any residual is recognised as ineffectiveness in net trading income in the income statement. Executed rates for fair value hedges of interest rate risk and commodity price risk have not been shown as these would represent the market reference rates at the time of designation.

Hedging instruments

		MATURITY ANALYSIS PER NOTIONAL AMOUNT				
Instrument type	Risk category	Less than 3 months $m	3 to 12 months $m	1 to 5 years $m	Over 5 years $m	Total $m
						CONSOLIDATED 2023
Derivative assets						
Commodity forwards and futures	Commodity price	**–**	**35**	**688**	**–**	**723**
Foreign exchange forwards and swaps	Foreign exchange	**27**	**41**	**369**	**–**	**437**
Interest rate swaps	Interest rate	**937**	**3,585**	**2,640**	**2,346**	**9,508**
Derivative liabilities						
Cross currency swaps	Interest rate	**–**	**491**	**143**	**75**	**709**
Commodity forwards and futures	Commodity price	**27**	**42**	**605**	**–**	**674**
Interest rate swaps	Interest rate	**–**	**2,745**	**8,658**	**3,917**	**15,320**
Foreign exchange forwards and swaps	Foreign exchange	**–**	**36**	**929**	**–**	**965**
						CONSOLIDATED 2022
Derivative assets						
Cross currency swaps	Interest rate	–	326	–	–	326
Commodity forwards and futures	Commodity price	–	–	856	–	856
Interest rate swaps	Interest rate	226	2,953	5,055	153	8,387
Derivative liabilities						
Cross currency swaps	Interest rate	–	–	586	74	660
Commodity forwards and futures	Commodity price	–	–	856	–	856
Interest rate swaps	Interest rate	1,389	3,237	7,092	2,757	14,475

		CONSOLIDATED CARRYING AMOUNT			
		2023		2022	
Instrument type	Risk category	**Asset $m**	**Liability $m**	Asset $m	Liability $m
Cross currency swaps	Interest rate	**–**	**18**	4	7
Commodity forwards and futures	Interest rate	**17**	**41**	–	83
Foreign exchange forwards and swaps	Commodity price	**10**	**67**	4	–
Interest rate swaps	Foreign exchange	**263**	**904**	146	421

Note 32
Hedge accounting continued

Instrument type	Risk category	MATURITY ANALYSIS PER NOTIONAL Less than 3 months $m	3 to 12 months $m	1 to 5 years $m	Over 5 years $m	Total $m
						COMPANY 2023
Derivative assets						
Commodity forwards and futures	Commodity price	**–**	**35**	**688**	**–**	**723**
Foreign exchange forwards and swaps	Foreign exchange	**27**	**41**	**369**	**–**	**437**
Interest rate swaps	Interest rate	**–**	**2,379**	**2,740**	**2,226**	**7,345**
Derivative liabilities						
Cross currency swaps	Interest rate	**–**	**491**	**143**	**75**	**709**
Commodity forwards and futures	Commodity price	**27**	**42**	**605**	**–**	**674**
Foreign exchange forwards and swaps	Foreign exchange	**–**	**36**	**929**	**–**	**965**
Interest rate swaps	Interest rate	**–**	**2,506**	**8,136**	**3,767**	**14,409**
						COMPANY 2022
Derivative assets						
Cross currency swaps	Interest rate	–	326	–	–	326
Foreign exchange forwards and swaps	Foreign exchange	–	–	856	–	856
Interest rate swaps	Interest rate	147	2,908	4,234	153	7,442
Derivative liabilities						
Cross currency swaps	Interest rate	–	–	586	74	660
Commodity forwards and futures	Commodity price	–	–	856	–	856
Interest rate swaps	Interest rate	–	1,335	6,762	2,757	10,854

The Company designates certain equity investments in foreign currency denominated subsidiaries as hedged items in fair value hedges of foreign exchange risk. The notional of these hedges amounts to $2,077 million (2022: $2,207 million). These balances change periodically, which result in periodic rebalancing of the hedge designations.

		COMPANY CARRYING AMOUNT			
		2023		2022	
Instrument type	Risk category	**Asset $m**	**Liability $m**	Asset $m	Liability $m
Cross currency swaps	Interest rate	**–**	**18**	4	7
Commodity forwards and futures	Commodity price	**17**	**41**	–	83
Foreign exchange forwards and swaps	Foreign exchange	**10**	**67**	4	–
Interest rate swaps	Interest rate	**256**	**871**	143	375
Foreign currency denominated borrowings	Foreign exchange	**–**	**2,077**	–	2,207

Hedged item

As the hedged item is adjusted only for the hedged risk, the hedged item's carrying value disclosed in the table will not be equivalent to its fair value as disclosed in other notes to these financial statements. The accumulated amount of the fair value hedge adjustments remaining in the Statements of financial positions for hedged items that have ceased to be adjusted for hedging gains and losses is $36 million loss (2022: $7 million gain) for the Consolidated Entity and $2 million gain for the Company (2022: $55 million gain) and have been included in the fair value hedge adjustment in the table that follows. These amounts will be amortised to the income statement on an effective interest rate basis.

Note 32
Hedge accounting continued

	2023		2022	
	Carrying amount[1] $m	Fair value hedge adjustment $m	Carrying amount[1] $m	Fair value hedge adjustment $m
				CONSOLIDATED
Assets				
Financial investments[2]	2,875	-	310	-
Loan assets	4,629	(101)	8,962	(103)
Property, plant and equipment	970	3	712	54
Liabilities				
Issued debt securities	12,165	403	9,799	142
Loan capital	4,841	523	4,097	243
				COMPANY
Assets				
Financial investments[2]	1,600	-	310	-
Loan assets	3,740	(96)	4,470	(90)
Property, plant and equipment	970	3	712	54
Investments in subsidiaries	2,077	114	2,207	(118)
Liabilities				
Issued debt securities	11,259	377	9,899	146
Loan capital	4,841	523	4,097	243

Hedge ineffectiveness

In the case of a fair value hedge, hedge ineffectiveness is the extent to which the changes in the fair value of the hedging instrument differ to that of the hedged item.

		GAIN/(LOSS) ON HEDGING INSTRUMENT		GAIN/(LOSS) ON HEDGED ITEM		HEDGE INEFFECTIVENESS GAIN/(LOSS)	
Hedging instruments	Risk category	2023 $m	2022 $m	2023 $m	2022 $m	2023 $m	2022 $m
							CONSOLIDATED
Cross currency swaps	Interest rate	(44)	(20)	44	20	-	-
Interest rate swaps and options	Interest rate	(538)	(337)	568	396	30	59
Commodity forwards and futures	Commodity price	101	(48)	(101)	48	-	-
Foreign exchange forwards and swaps	Foreign exchange	(50)	(5)	50	5	-	-
Total		(531)	(410)	561	469	30	59
							COMPANY
Cross currency swaps	Interest rate	(12)	(20)	12	20	-	-
Interest rate swaps	Interest rate	(561)	(469)	561	472	-	3
Commodity forwards and futures	Commodity price	101	(48)	(101)	48	-	-
Foreign exchange forwards and swaps	Foreign exchange	(50)	(5)	50	5	-	-
Foreign currency denominated borrowings	Foreign exchange	(232)	85	232	(85)	-	-
Total		(754)	(457)	754	460	-	3

(1) The carrying amounts in the table exclude accrued interest and includes fair value hedge adjustments.
(2) The carrying amount includes debt instruments classified at FVOCI. Where this applies the fair value hedge adjustment for interest rate risk is recognised in the income statement together with changes in the fair value of the hedging instrument.

Note 33
Financial risk management

Risk Management and Risk Management Group (RMG)

Risk is an integral part of the Consolidated Entity's businesses. The material risks faced by the Consolidated Entity include aggregate, asset, conduct, credit, environmental and social, equity, financial crime, legal, liquidity, market, operational (including cyber and information security), regulatory and compliance, reputational, strategic, tax, and work health and safety risks.

The primary responsibility for risk management lies with the business. An important part of the role of all staff throughout the Consolidated Entity is to ensure they manage risks appropriately.

RMG is independent of other areas of the Consolidated Entity. RMG approval is required for all material risk acceptance decisions. RMG reviews and assesses risks and sets limits. Where appropriate, these limits are approved by the Executive Committee and the Board. The Head of RMG, as the Consolidated Entity's CRO, is a member of the Executive Committee of MGL and MBL and reports directly to the Macquarie Group CEO with a secondary reporting line to the Board Risk Committee. Further details on the Risk Management Framework in the Consolidated Entity can be found in the Risk Management Report of this Annual Report.

Note 33.1 Credit risk

Credit risk is the risk that a counterparty will fail to complete its contractual obligations when they fall due. The consequential loss is the amount of the financial obligation not paid back, or the loss incurred in replicating a trading contract with a new counterparty.

Credit risk assessment and approval

Exercise of credit authority within the Consolidated Entity is undertaken under authority delegated by the MGL and MBL Boards directly. Credit risk assessments include comprehensive review of the creditworthiness of the counterparty and related entities, key risk and mitigants, and that the downside risk is properly understood and acceptable.

After this analysis is undertaken, limits are set for an acceptable level of potential exposure. All wholesale limits and ratings are reviewed at least once a year or more frequently if required. Retail credit exposures are monitored by the business units and overseen by RMG Credit on a portfolio basis.

All credit exposures are monitored regularly against limits. For limit monitoring, credit exposures for loan assets are reported at amortised cost. Derivative exposures are measured using high confidence potential future underlying asset prices.

To mitigate credit risk, where appropriate, the Consolidated Entity makes use of margining and other forms of collateral or credit enhancement techniques (including guarantees, letters of credit and the purchase of credit default swaps).

Ratings and reviews

Refer to Note 12 *Expected credit losses* for details regarding the manner in which the Consolidated Entity has adopted and applied AASB 9's expected credit loss impairment requirements.

For the purpose of presenting the credit risk associated with assets on the Consolidated Entity's Statements of financial position in accordance with the requirements of AASB 9, the following methodology has been adopted.

Wholesale rating

Macquarie wholesale ratings broadly correspond to Standard & Poor's credit ratings as follows.

Credit Profile	Internal Rating	Standard & Poor's Equivalent
Investment grade	MQ1 to MQ8	AAA to BBB–
Non-investment grade	MQ9 to MQ16	BB+ to C
Default	MQ99	Default

Retail rating

Retail pools are mapped to the credit quality grades based on their PDs.

Mapping retail portfolios to the credit grades has been done for comparability of the overall portfolio presentation and does not reflect the way that the retail portfolio is segmented for management purposes. Management reviews a range of information, including past due status for the portfolio, to assess the credit quality of these assets.

Due from subsidiaries/due from related body corporate entities

Balances with subsidiaries and related body corporate entities are mapped to the rating grades assigned internally to these counterparties for the pricing of internal funding arrangements on an arm's length basis.

Portfolio and country risk

A review of the credit portfolio analysing credit concentrations by counterparty, geography, risk type, industry and credit quality is carried out quarterly and reported to the Board semi-annually. Policies are in place to regulate large exposures to single counterparties or groups of counterparties.

The Consolidated Entity has a country risk management framework which covers the assessment of country risk and the approval of country risk limits. Where appropriate the country risk is mitigated by political risk insurance.

During the financial year, the Consolidated Entity has made changes to the presentation of certain balances under credit quality of financial assets and credit risk concentration sections of Note 33.1 *Credit risk* and has restated comparative information to conform to changes in the current year. Refer to Note 41(xxix) *Comparatives* for the details on these changes.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Credit quality of financial assets

The table below discloses, by credit rating grades and ECL impairment stage, the gross carrying amount[1] of assets measured at amortised cost or FVOCI and off balance sheet exposures of the Consolidated Entity subject to the impairment requirements of AASB 9 *Financial Instruments*. The credit quality is based on the counterparty's credit rating using the Consolidated Entity's credit rating system and excludes the benefit of collateral and credit enhancements.

	Stage I[1] $m	Stage II[2] $m	Stage III[2] $m	Total $m
				CONSOLIDATED 2023
Investment grade				
Cash and bank balances	41,455	-	-	41,455
Cash collateralised lending and reverse repurchase agreements	35,335	-	-	35,335
Margin money and settlement assets	16,864	-	-	16,864
Financial investments	16,546	-	-	16,546
Held for sale and other assets	2,140	-	-	2,140
Loan assets	60,084	1,654	-	61,738
Due from related body corporate entities	556	-	-	556
Off balance sheet exposures	9,998	75	-	10,073
Total investment grade	**182,978**	**1,729**	**-**	**184,707**
Non-investment grade				
Cash and bank balances	158	-	-	158
Cash collateralised lending and reverse repurchase agreements	2,822	-	-	2,822
Margin money and settlement assets	1,946	-	-	1,946
Financial investments	45	-	-	45
Held for sale and other assets	427	6	-	433
Loan assets	63,178	16,110	-	79,288
Off balance sheet exposures	12,057	316	-	12,373
Total non-investment grade	**80,633**	**16,432**	**-**	**97,065**
Default				
Cash collateralised lending and reverse repurchase agreements	-	-	87	87
Margin money and settlement assets	-	-	40	40
Financial investments	-	-	-	-
Held for sale and other assets	-	-	50	50
Loan assets	-	-	1,174	1,174
Off balance sheet exposures	-	-	88	88
Total default	**-**	**-**	**1,439**	**1,439**
Total gross credit risk	**263,611**	**18,161**	**1,439**	**283,211**
Total gross credit risk by ECL stage				
Cash and bank balances	41,613	-	-	41,613
Cash collateralised lending and reverse repurchase agreements	38,157	-	87	38,244
Margin money and settlement assets	18,810	-	40	18,850
Financial investments	16,591	-	-	16,591
Held for sale and other assets	2,567	6	50	2,623
Loan assets	123,262	17,764	1,174	142,200
Due from related body corporate entities	556	-	-	556
Off balance sheet exposures	22,055	391	88	22,534
Total gross credit risk by ECL stage	**263,611**	**18,161**	**1,439**	**283,211**

(1) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustment and ECL allowance. Accordingly, these exposures will not be equal to the amount presented in the Statements of financial position.
(1) For definitions of Stage I, II and III, refer to Note 12 *Expected credit losses*. Whilst exposures may have migrated to Stage II it should not be inferred that such exposures are of a lower credit quality.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below discloses, by credit rating grades and ECL impairment stage, the gross carrying amount[1] of assets measured at amortised cost or FVOCI and off balance sheet exposures of the Company subject to the impairment requirements of AASB 9 *Financial Instruments*. The credit quality is based on the counterparty's credit rating using the Company's credit rating system and excludes the benefit of collateral and credit enhancements.

	Stage I[1] $m	Stage II[2] $m	Stage III[2] $m	Total $m
				COMPANY 2023
Investment grade				
Cash and bank balances	36,150	–	–	36,150
Cash collateralised lending and reverse repurchase agreements	34,981	–	–	34,981
Margin money and settlement assets	12,958	–	–	12,958
Financial investments	14,415	–	–	14,415
Held for sale and other assets	1,653	–	–	1,653
Loan assets	59,560	1,652	–	61,212
Due from related body corporate entities	340	–	–	340
Due from subsidiaries	9,907	–	–	9,907
Off balance sheet exposures[2]	8,306	58	–	8,364
Total investment grade	**178,270**	**1,710**	**–**	**179,980**
Non-investment grade				
Cash and bank balances	26	–	–	26
Cash collateralised lending and reverse repurchase agreements	2,819	–	–	2,819
Margin money and settlement assets	1,515	1	–	1,516
Financial investments	45	–	–	45
Held for sale and other assets	592	4	–	596
Loan assets	62,390	16,032	–	78,422
Off balance sheet exposures[3]	12,717	259	–	12,976
Total non-investment grade	**80,104**	**16,296**	**–**	**96,400**
Default				
Cash collateralised lending and reverse repurchase agreements	–	–	87	87
Margin money and settlement assets	–	–	39	39
Held for sale and other assets	–	–	48	48
Loan assets	–	–	959	959
Off balance sheet exposures[3]	–	–	87	87
Total default	**–**	**–**	**1,220**	**1,220**
Total gross credit risk	**258,374**	**18,006**	**1,220**	**277,600**
Total gross credit risk by ECL stage				
Cash and bank balances	36,176	–	–	36,176
Cash collateralised lending and reverse repurchase agreements	37,800	–	87	37,887
Margin money and settlement assets	14,473	1	39	14,513
Financial investments	14,460	–	–	14,460
Held for sale and other assets	2,245	4	48	2,297
Loan assets	121,950	17,684	959	140,593
Due from related body corporate entities	340	–	–	340
Due from subsidiaries	9,907	–	–	9,907
Off balance sheet exposures[3]	21,023	317	87	21,427
Total gross credit risk by ECL stage	**258,374**	**18,006**	**1,220**	**277,600**

(1) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal to amount presented in the Statements of financial position.
(1) For definitions of Stage I, II and III, refer to Note 12 *Expected credit losses*. Whilst exposures may have migrated to Stage II it should not be inferred that such exposures are of a lower credit quality.
(2) The Company includes guarantees to counterparties with respect to their exposures to certain subsidiaries. These guarantees have a maximum value of $9,944 million (2022: $12,753 million) with the amount disclosed in the table above being the component of that guarantee value equivalent to the fair value of the underlying risk position at the reporting date.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Further analysis of credit risk for loan assets, being the Consolidated Entity's most material credit exposure is presented below.

				OF WHICH PAST DUE				
	Investment grade $m	Non-investment grade $m	Total other than default $m	Up to 30 days $m	31 to <90 days $m	Total past due but not default $m	Default $m	Total $m
								CONSOLIDATED 2023
Home loans[1]	**54,396**	**59,530**	**113,926**	**795**	**235**	**1,030**	**562**	**114,488**
Asset financing	**516**	**6,419**	**6,935**	**256**	**40**	**296**	**223**	**7,158**
Corporate, commercial and other lending	**6,826**	**13,339**	**20,165**	**26**	**22**	**48**	**389**	**20,554**
Total[2]	**61,738**	**79,288**	**141,026**	**1,077**	**297**	**1,374**	**1,174**	**142,200**
								COMPANY 2023
Home loans[1]	**54,401**	**59,529**	**113,930**	**782**	**229**	**1,011**	**564**	**114,494**
Asset financing	**145**	**5,922**	**6,067**	**156**	**21**	**177**	**207**	**6,274**
Corporate, commercial and other lending	**6,666**	**12,971**	**19,638**	**26**	**22**	**48**	**188**	**19,825**
Total[2]	**61,212**	**78,422**	**139,634**	**964**	**272**	**1,236**	**959**	**140,593**

(1) Includes $7,111 million home loans for which insurance has been obtained from Lenders Mortgage Insurance (LMI) counterparties and another $24,400 million home loans where the Consolidated Entity has bought risk protection from a panel of investment grade companies via an excess of loss structure. Refer to collateral and credit enhancements section of Note 36.1 *Credit risk* for further details.
(2) The credit quality is based on the counterparties' credit rating as determined by the Consolidated Entity's credit rating system and excludes the benefit of collateral and credit enhancements.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below discloses, by credit rating grades and ECL impairment stage, the gross carrying amount[1] of assets measured at amortised cost or FVOCI and off balance sheet exposures of the Consolidated Entity subject to the impairment requirements of AASB 9 *Financial Instruments*. The credit quality is based on the counterparty's credit rating using the Consolidated Entity's credit rating system and excludes the benefit of collateral and credit enhancements.

	Stage I[1] $m	Stage II[2] $m	Stage III[2] $m	Total $m
				CONSOLIDATED 2022
Investment grade				
Cash and bank balances	48,912	–	–	48,912
Cash collateralised lending and reverse repurchase agreements	34,845	–	–	34,845
Margin money and settlement assets	16,543	–	–	16,543
Financial investments	6,076	–	–	6,076
Held for sale and other assets	1,244	–	–	1,244
Loan assets	50,181	1,148	–	51,329
Due from related body corporate entities	1,399	–	–	1,399
Off balance sheet exposures	11,296	5	–	11,301
Total investment grade	170,496	1,153	–	171,649
Non-investment grade				
Cash and bank balances	60	–	–	60
Cash collateralised lending and reverse repurchase agreements	3,533	–	–	3,533
Margin money and settlement assets	2,381	5	–	2,386
Financial investments	190	–	–	190
Held for sale and other assets	911	9	–	920
Loan assets	58,470	12,605	–	71,075
Off balance sheet exposures	11,032	22	–	11,054
Total non-investment grade	76,577	12,641	–	89,218
Default				
Margin money and settlement assets	–	–	38	38
Held for sale and other assets	–	–	152	152
Loan assets	–	–	1,031	1,031
Off balance sheet exposures	–	–	7	7
Total default	–	–	1,228	1,228
Total gross credit risk	247,073	13,794	1,228	262,095
Total gross credit risk by ECL stage				
Cash and bank balances	48,972	–	–	48,972
Cash collateralised lending and reverse repurchase agreements	38,378	–	–	38,378
Margin money and settlement assets	18,924	5	38	18,967
Financial investments	6,266	–	–	6,266
Held for sale and other assets	2,155	9	152	2,316
Loan assets	108,651	13,753	1,031	123,435
Due from related body corporate entities	1,399	–	–	1,399
Off balance sheet exposures	22,328	27	7	22,362
Total gross credit risk by ECL stage	**247,073**	**13,794**	**1,228**	**262,095**

(1) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal to amount presented in the Statements of financial position.
(1) For definitions of Stage I, II and III, refer to Note 12 *Expected credit losses*. Whilst exposures may have migrated to Stage II it should not be inferred that such exposures are of a lower credit quality.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below discloses, by credit rating grades and ECL impairment stage, the gross carrying amount[1] of assets measured at amortised cost or FVOCI and off balance sheet exposures of company subject to impairment requirements of AASB9 *Financial Instruments*. The credit quality is based on the counterparty's credit rating using the Company's credit rating system and excludes the benefit of collateral and credit enhancements.

	Stage I[1] $m	Stage II[2] $m	Stage III[2] $m	Total $m
				COMPANY 2022
Investment grade				
Cash and bank balances	43,594	–	–	43,594
Cash collateralised lending and reverse repurchase agreements	31,597	–	–	31,597
Margin money and settlement assets	11,853	–	–	11,853
Financial investments	6,076	–	–	6,076
Held for sale and other assets	954	–	–	954
Loan assets	49,830	1,146	–	50,976
Due from related body corporate entities	1,122	–	–	1,122
Due from subsidiaries	11,727	–	–	11,727
Off balance sheet exposures[2]	8,187	4	–	8,191
Total investment grade	164,940	1,150	–	166,090
Non-investment grade				
Cash collateralised lending and reverse repurchase agreements	2,438	–	–	2,438
Margin money and settlement assets	1,983	2	–	1,985
Financial investments	190	–	–	190
Held for sale and other assets	748	7	–	755
Loan assets	57,213	12,409	–	69,622
Due from subsidiaries	34	–	–	34
Off balance sheet exposures[3]	17,670	22	–	17,692
Total non-investment grade	80,276	12,440	–	92,716
Default				
Margin money and settlement assets	–	–	35	35
Held for sale and other assets	–	–	116	116
Loan assets	–	–	974	974
Off balance sheet exposures[3]	–	–	7	7
Total default	–	–	1,132	1,132
Total gross credit risk	245,216	13,590	1,132	259,938
Total gross credit risk by ECL stage				
Cash and bank balances	43,594	–	–	43,594
Cash collateralised lending and reverse repurchase agreements	34,035	–	–	34,035
Margin money and settlement assets	13,836	2	35	13,873
Financial investments	6,266	–	–	6,266
Held for sale and other assets	1,702	7	116	1,825
Loan assets	107,043	13,555	974	121,572
Due from related body corporate entities	1,122	–	–	1,122
Due from subsidiaries	11,761	–	–	11,761
Off balance sheet exposures[3]	25,857	26	7	25,890
Total gross credit risk by ECL stage	245,216	13,590	1,132	259,938

(1) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal to amount presented in the Statements of financial position.
(1) For definitions of Stage I, II and III, refer to Note 12 *Expected credit losses*. Whilst exposures may have migrated to Stage II it should not be inferred that such exposures are of a lower credit quality.
(2) The Company includes guarantees to counterparties with respect to their exposures to certain subsidiaries. These guarantees have a maximum value of $9,944 million (2022: $12,753 million) with the amount disclosed in the table above being the component of that guarantee value equivalent to the fair value of the underlying risk position at the reporting date.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Further analysis of credit risk for loan assets being the Consolidated Entity's most material credit exposure is presented below.

	Investment grade $m	Non-investment grade $m	Total other than default $m	OF WHICH PAST DUE: Up to 30 days $m	OF WHICH PAST DUE: 31 to <90 days $m	OF WHICH PAST DUE: Total past due but not default $m	Default $m	Total $m
								CONSOLIDATED 2022
Home loans(1)	44,431	49,923	94,354	462	203	665	560	94,914
Asset financing	778	9,100	9,878	236	72	308	309	10,187
Corporate, commercial and other lending	6,120	12,052	18,172	29	7	36	162	18,334
Total(2)	51,329	71,075	122,404	727	282	1,009	1,031	123,435
								COMPANY 2022
Home loans(1)	44,410	49,892	94,302	448	77	525	561	94,863
Asset financing	468	7,978	8,446	193	2	195	258	8,704
Corporate, commercial and other lending	6,098	11,752	17,850	29	1	30	155	18,005
Total(2)	50,976	69,622	120,598	670	80	750	974	121,572

(1) Includes $9,350 million home loans for which insurance has been obtained from Lenders Mortgage Insurance (LMI) counterparties and another $32,016 million home loans where the Consolidated Entity has bought risk protection from a global panel of investment grade reinsurers via an excess of loss and quota share structure. Refer to collateral and credit enhancements section of Note 36.1 *Credit risk* for further details.
(2) The credit quality is based on the counterparties' credit rating as determined by the Consolidated Entity's credit rating system and excludes the benefit of collateral and credit enhancements.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Credit risk concentration

The table below details the concentration of credit risk by significant geographical location and counterparty type of the Consolidated Entity's assets measured at amortised cost or FVOCI and off balance sheet exposures subject to the impairment requirements of AASB 9 *Financial Instruments*. The geographical location is determined by the country of risk. Counterparty type is based on APRA classification.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				CONSOLIDATED 2023
Australia				
Cash and bank balances	–	32,316	2	32,318
Cash collateralised lending and reverse repurchase agreements	–	7,720	–	7,720
Held for sale and other assets	14	105	646	765
Margin money and settlement assets	274	2,045	912	3,231
Financial investments	5,290	7,743	2	13,035
Loan assets(1)	36	2,588	130,280	132,904
Due from related body corporate entities(2)	–	169	5	174
Off balance sheet exposures	28	312	19,846	20,186
Total Australia	**5,642**	**52,998**	**151,693**	**210,333**
Asia Pacific				
Cash and bank balances	–	1,078	–	1,078
Cash collateralised lending and reverse repurchase agreements	–	3,774	–	3,774
Held for sale and other assets	1	–	193	194
Margin money and settlement assets	–	788	243	1,031
Financial investments	–	220	–	220
Loan assets	–	110	271	381
Due from related body corporate entities(2)	–	150	8	158
Off balance sheet exposures	–	–	20	20
Total Asia Pacific	**1**	**6,120**	**735**	**6,856**
Europe, Middle East and Africa				
Cash and bank balances	–	4,605	–	4,605
Cash collateralised lending and reverse repurchase agreements	–	17,766	–	17,766
Held for sale and other assets	161	–	1,085	1,246
Margin money and settlement assets	–	1,198	9,721	10,919
Financial investments	2,306	309	–	2,615
Loan assets	–	894	2,265	3,159
Due from related body corporate entities(2)	–	39	22	61
Off balance sheet exposures	30	29	394	453
Total Europe, Middle East and Africa	**2,497**	**24,840**	**13,487**	**40,824**
Americas				
Cash and bank balances	–	3,612	–	3,612
Cash collateralised lending and reverse repurchase agreements	–	8,984	–	8,984
Held for sale and other assets	–	202	216	418
Margin money and settlement assets	33	900	2,736	3,669
Financial investments	6	715	–	721
Loan assets	10	3,751	1,995	5,756
Due from related body corporate entities(2)	–	156	7	163
Off balance sheet exposures	–	203	1,672	1,875
Total Americas	**49**	**18,523**	**6,626**	**25,198**
Total gross credit risk(3)	**8,189**	**102,481**	**172,541**	**283,211**

(1) Loan assets in the Australia region includes home loans of $114,503 million, Asset financing of $6,367 million and Corporate, commercial and other lending of $12,034 million.
(2) Due from related body corporates have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.
(3) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal the amount presented in the Statements of financial position.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration of credit risk by significant geographical location and counterparty type of the Company's assets measured at amortised cost or FVOCI and off balance sheet exposures subject to the impairment requirements of AASB 9 *Financial Instruments*. The geographical location is determined by the country of risk. Counterparty type is based on APRA classification.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				COMPANY 2023
Australia				
Cash and bank balances	–	32,077	2	32,079
Cash collateralised lending and reverse repurchase agreements	–	7,187	–	7,187
Held for sale and other assets	7	82	631	720
Margin money and settlement assets	274	2,020	779	3,073
Financial investments	4,695	7,745	–	12,440
Loan assets(1)	–	2,567	129,945	132,512
Due from related body corporate entities(2)	–	158	–	158
Due from subsidiaries(2)	–	5,691	–	5,691
Off balance sheet exposures	28	305	17,805	18,138
Total Australia	5,004	57,832	149,162	211,998
Asia Pacific				
Cash and bank balances	–	855	–	855
Cash collateralised lending and reverse repurchase agreements	–	3,746	–	3,746
Held for sale and other assets	1	–	188	189
Margin money and settlement assets	–	743	205	948
Financial investments	–	220	–	220
Loan assets	–	109	168	277
Due from related body corporate entities(2)	–	57	1	58
Due from subsidiaries(2)	–	142	9	151
Off balance sheet exposures	–	–	19	19
Total Asia Pacific	1	5,872	590	6,463
Europe, Middle East and Africa				
Cash and bank balances	–	977	–	977
Cash collateralised lending and reverse repurchase agreements	–	17,594	–	17,594
Held for sale and other assets	161	8	1,027	1,196
Margin money and settlement assets	–	1,144	6,882	8,026
Financial investments	772	307	–	1,079
Loan assets	–	891	1,648	2,539
Due from related body corporate entities(2)	–	24	12	36
Due from subsidiaries(2)	–	3,071	440	3,511
Off balance sheet exposures	30	29	1,523	1,582
Total Europe, Middle East and Africa	963	24,045	11,532	36,540
Americas				
Cash and bank balances	–	2,265	–	2,265
Cash collateralised lending and reverse repurchase agreements	–	9,360	–	9,360
Held for sale and other assets	–	5	187	192
Margin money and settlement assets	–	830	1,636	2,466
Financial investments	6	715	–	721
Loan assets	–	3,722	1,543	5,265
Due from related body corporate entities(2)	–	88	–	88
Due from subsidiaries(2)	–	551	3	554
Off balance sheet exposures	–	169	1,519	1,688
Total Americas	6	17,705	4,888	22,599
Total gross credit risk(3)	5,974	105,454	166,172	277,600

(1) Loan assets in the Australia region includes home loans of $114,499 million, Asset financing of $6,014 million and Corporate, commercial and other lending of $11,999 million.
(2) Due from related body corporates and subsidiaries have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.
(3) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal the amount presented in the Statements of financial position.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration by significant geographical locations and counterparty type of the Consolidated Entity's financial assets which are not subject to impairment requirements of AASB 9 *Financial Instruments* since they are measured at fair value through profit and loss. Financial assets that are subject to risks other than credit risk, such as equity investments, commodities, bank notes and coins are excluded from the table below.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				CONSOLIDATED 2023
Australia				
Cash collateralised lending and reverse repurchase agreements	–	462	–	462
Trading assets	988	125	2	1,115
Derivative assets	2	742	1,657	2,401
Margin money and settlement assets	–	–	–	–
Held for sale and other assets	–	–	7	7
Loan assets	–	50	50	100
Due from related body corporate entities[1]	–	3,374	–	3,374
Total Australia	**990**	**4,753**	**1,716**	**7,459**
Asia Pacific				
Cash collateralised lending and reverse repurchase agreements	–	666	–	666
Trading assets	43	14	560	617
Derivative assets	38	1,684	1,011	2,733
Financial investments	–	39	6	45
Margin money and settlement assets	–	–	2	2
Held for sale and other assets	–	–	591	591
Due from related body corporate entities[1]	–	–	2	2
Total Asia Pacific	**81**	**2,403**	**2,172**	**4,656**
Europe, Middle East and Africa				
Cash collateralised lending and reverse repurchase agreements	–	1,441	–	1,441
Trading assets	–	10	2,039	2,049
Derivative assets	–	6,726	13,754	20,480
Held for sale and other assets	–	–	947	947
Loan assets	–	–	180	180
Due from related body corporate entities[1]	–	3	–	3
Total Europe, Middle East and Africa	**–**	**8,180**	**16,920**	**25,100**
Americas				
Cash collateralised lending and reverse repurchase agreements	–	2,394	–	2,394
Trading assets	1,044	1	1,647	2,692
Derivative assets	46	7,226	2,934	10,206
Margin money and settlement assets	1	–	573	574
Held for sale and other assets	–	2	808	810
Loan assets	–	–	5	5
Due from related body corporate entities[1]	–	–	–	–
Total Americas	**1,091**	**9,623**	**5,967**	**16,681**
Total gross credit risk	**2,162**	**24,959**	**26,775**	**53,896**

(1) Due from related body corporates have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration by significant geographical locations and counterparty type of the Company's financial assets which are not subject to impairment requirements of AASB 9 *Financial Instruments* since they are measured at fair value through profit and loss. Financial assets that are subject to risks other than credit risk, such as equity investments, commodities, bank notes and coins are excluded from the table below.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				COMPANY 2023
Australia				
Cash collateralised lending and reverse repurchase agreements	–	462	–	462
Trading assets	988	124	1	1,113
Financial investments	4	697	1,647	2,348
Derivative assets	–	–	–	–
Other assets	–	–	7	7
Loan assets	–	53	10	63
Due from subsidiaries[1]	–	353	1	354
Due from related body corporate entities[1]	–	3,374	–	3,374
Total Australia	**992**	**5,063**	**1,666**	**7,721**
Asia Pacific				
Cash collateralised lending and reverse repurchase agreements	–	666	–	666
Trading assets	43	14	560	617
Derivative assets	38	1,683	925	2,646
Financial investments	–	39	6	45
Margin money and settlement assets	–	–	2	2
Other assets	–	–	591	591
Due from subsidiaries[1]	–	92	24	116
Due from related body corporate entities[1]	–	–	2	2
Total Asia Pacific	**81**	**2,494**	**2,110**	**4,685**
Europe, Middle East and Africa				
Cash collateralised lending and reverse repurchase agreements	–	1,441	–	1,441
Trading assets	–	10	2,039	2,049
Derivative assets	–	6,529	7,200	13,729
Other assets	–	–	589	589
Loan assets	–	–	129	129
Due from subsidiaries[1]	–	5,216	994	6,210
Due from related body corporate entities[1]	–	3	–	3
Total Europe, Middle East and Africa	**–**	**13,199**	**10,951**	**24,150**
Americas				
Financial investments	–	2,394	–	2,394
Trading assets	1,038	1	1,182	2,221
Derivative assets	11	6,922	1,520	8,453
Margin money and settlement assets	–	–	48	48
Held for sale and other assets	–	2	310	312
Loan assets	–	–	2	2
Due from subsidiaries[1]	–	1,728	–	1,728
Due from related body corporate entities[1]	–	–	–	–
Total Americas	**1,049**	**11,047**	**3,062**	**15,158**
Total gross credit risk	**2,122**	**31,803**	**17,789**	**51,714**

(1) Due from related body corporates and subsidiaries have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration of credit risk by significant geographical location and counterparty type of the Consolidated Entity's assets measured at amortised cost or FVOCI and off balance sheet exposures subject to the impairment requirements of AASB 9 *Financial Instruments*. The geographical location is determined by the country of risk. Counterparty type is based on APRA classification.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				CONSOLIDATED 2022
Australia				
Cash and bank balances	–	40,370	–	40,370
Cash collateralised lending and reverse repurchase agreements	–	4,378	–	4,378
Held for sale and other assets	7	87	972	1,066
Margin money and settlement assets	20	1,062	906	1,988
Financial investments	2,323	3,479	–	5,802
Loan assets[(1)]	35	3,339	111,904	115,278
Due from related body corporate entities[(2)]	–	697	2	699
Off balance sheet exposures	28	467	19,079	19,574
Total Australia	2,413	53,878	132,863	189,155
Asia Pacific				
Cash and bank balances	–	527	–	527
Cash collateralised lending and reverse repurchase agreements	–	2,896	–	2,896
Held for sale and other assets	–	5	144	149
Margin money and settlement assets	–	259	508	767
Financial investments	154	79	–	233
Loan assets	–	90	281	371
Due from related body corporate entities[(2)]	–	229	11	240
Off balance sheet exposures	–	1	2	3
Total Asia Pacific	154	4,086	946	5,186
Europe, Middle East and Africa				
Cash and bank balances	–	4,591	–	4,591
Cash collateralised lending and reverse repurchase agreements	–	22,271	–	22,271
Held for sale and other assets	10	14	884	908
Margin money and settlement assets	18	1,876	10,497	12,391
Financial investments	–	220	–	220
Loan assets	–	921	1,537	2,458
Due from related body corporate entities[(2)]	–	171	10	181
Off balance sheet exposures	–	426	352	778
Total Europe, Middle East and Africa	28	30,490	13,280	43,798
Americas				
Cash and bank balances	–	3,484	–	3,484
Cash collateralised lending and reverse repurchase agreements	–	8,833	–	8,833
Held for sale and other assets	–	15	178	193
Margin money and settlement assets	44	928	2,849	3,821
Financial investments	–	11	–	11
Loan assets	11	3,650	1,667	5,328
Due from related body corporate entities[(2)]	–	277	2	279
Off balance sheet exposures	17	340	1,650	2,007
Total Americas	72	17,538	6,346	23,956
Total gross credit risk[(3)]	2,667	105,993	153,435	262,095

(1) Loan assets in the Australia region includes home loans of $94,300 million, Asset financing of $9,337 million and Corporate, commercial and other lending of $11,641 million.
(2) Due from related body corporates have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA)classification.
(3) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposures of financial assets measured at FVOCI represents carrying value before fair value adjustment and ECL allowance. Accordingly, these exposure values will not equal the amount presented in the Statements of financial position.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration of credit risk by significant geographical location and counterparty type of the Company's assets measured at amortised cost or FVOCI and off balance sheet exposures subject to the impairment requirements of AASB 9 *Financial Instruments*. The geographical location is determined by the country of risk. Counterparty type is based on APRA classification.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				COMPANY 2022
Australia				
Cash and bank balances	–	40,194	–	40,194
Cash collateralised lending and reverse repurchase agreements	–	4,026	–	4,026
Other assets	–	57	954	1,011
Margin money and settlement assets	20	1,039	642	1,701
Financial investments	2,323	3,478	–	5,802
Loan assets(1)	–	3,291	110,784	114,075
Due from related body corporate entities(2)	–	576	–	576
Due from subsidiaries(2)	–	4,273	–	4,273
Off balance sheet exposures	28	468	17,539	18,035
Total Australia	**2,371**	**57,402**	**129,919**	**189,693**
Asia Pacific				
Cash and bank balances	–	237	–	237
Cash collateralised lending and reverse repurchase agreements	–	2,896	–	2,896
Other assets	–	5	141	146
Margin money and settlement assets	–	244	489	733
Financial investments	154	79	–	233
Loan assets	–	90	187	277
Due from related body corporate entities(2)	–	135	4	139
Due from subsidiaries(2)	–	105	36	141
Off balance sheet exposures	–	–	46	46
Total Asia Pacific	**154**	**3,791**	**903**	**4,848**
Europe, Middle East and Africa				
Cash and bank balances	–	1,104	–	1,104
Cash collateralised lending and reverse repurchase agreements	–	19,557	–	19,557
Other assets	10	2	549	561
Margin money and settlement assets	18	1,810	7,437	9,265
Financial investments	–	220	–	220
Loan assets	–	919	1,270	2,189
Due from related body corporate entities(2)	–	160	2	162
Due from subsidiaries(2)	–	4,484	425	4,909
Off balance sheet exposures	–	4,664	1,212	5,876
Total Europe, Middle East and Africa	**28**	**32,920**	**10,895**	**43,843**
Americas				
Cash and bank balances	–	2,059	–	2,059
Cash collateralised lending and reverse repurchase agreements	–	7,556	–	7,556
Other assets	–	15	92	107
Margin money and settlement assets	–	829	1,345	2,174
Financial investments	–	11	–	11
Loan assets	6	3,650	1,375	5,031
Due from related body corporate entities(2)	–	245	–	245
Due from subsidiaries(2)	–	2,404	34	2,438
Off balance sheet exposures	21	340	1,572	1,933
Total Americas	**27**	**17,109**	**4,418**	**21,554**
Total gross credit risk(3)	**2,580**	**111,223**	**146,135**	**259,938**

(1) Loan assets in the Australia region includes home loans of $94,232 million, Asset financing of $8,321 million and Corporate, commercial and other lending of $11,522 million.
(2) Due from related body corporates and subsidiaries have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.
(3) The gross exposure of financial assets measured at amortised cost represents the amortised cost before the ECL allowance and the gross exposure of financial assets measured at FVOCI represents carrying value before fair value adjustments and ECL allowance. Accordingly, these exposure values will not equal the amount presented in the Statements of financial position.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration by significant geographical locations and counterparty type of the Consolidated Entity's financial assets which are not subject to the impairment requirements of AASB 9 *Financial Instruments* since they are measured at fair value through profit and loss. Financial assets that are subject to risks other than credit risk, such as equity investments, commodities, bank notes and coins are excluded from the below table.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				CONSOLIDATED 2022
Australia				
Trading assets	2	390	871	1,263
Derivative assets	5	1,834	1,856	3,695
Margin money and settlement assets	–	–	1	1
Held for sale and other assets	–	–	56	56
Loan assets	–	91	61	152
Due from related body corporate entities(1)	–	1,721	–	1,721
Total Australia	**7**	**4,036**	**2,845**	**6,888**
Asia Pacific				
Cash collateralised lending and reverse repurchase agreements	–	1	–	1
Trading assets	124	299	3,923	4,346
Derivative assets	86	5,209	2,988	8,283
Financial investments	–	9	5	14
Money margin and settlement assets	–	–	5	5
Held for sale and other assets	–	–	300	300
Due from related body corporate entities(1)	–	2	–	2
Total Asia Pacific	**210**	**5,520**	**7,221**	**12,951**
Europe, Middle East and Africa				
Cash collateralised lending and reverse repurchase agreements	–	2,805	–	2,805
Trading assets	11	102	2210	2323
Derivative assets	–	12,138	41,959	54,097
Held for sale and other assets	–	–	382	382
Loan assets	–	32	22	54
Due from related body corporate entities(1)	–	–	7	7
Total Europe, Middle East and Africa	**11**	**15,077**	**44,580**	**59,668**
Americas				
Cash collateralised lending and reverse repurchase agreements	–	1,364	–	1,364
Trading assets	299	–	370	669
Derivative assets	24	12,499	6,018	18,541
Money margin and settlement assets	–	121	397	518
Held for sale and other assets	–	–	938	938
Loan assets	–	–	56	56
Due from related body corporate entities(1)	–	11	–	11
Total Americas	**323**	**13,995**	**7,779**	**22,097**
Total gross credit risk	**551**	**38,628**	**62,425**	**101,604**

(1) Due from related body corporates have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

The table below details the concentration by significant geographical locations and counterparty type of the Company's financial assets which are not subject to the impairment requirements of AASB 9 *Financial Instruments* since they are measured at fair value through profit and loss. Financial assets that are subject to risks other than credit risk, such as equity investments, commodities, bank notes and coins are excluded from the below table.

	Governments $m	Financial Institutions $m	Other $m	Total $m
				COMPANY 2022
Australia				
Trading assets	2	369	871	1,242
Derivative assets	5	1,786	1,856	3,647
Margin money and settlement assets	–	–	1	1
Held for sale and other assets	–	–	16	16
Loan assets	–	96	11	107
Due from subsidiaries(1)	–	377	2	379
Due from related body corporate entities(1)	–	1,721	–	1,721
Total Australia	**7**	**4,349**	**2,757**	**7,113**
Asia Pacific				
Cash collateralised lending and reverse repurchase agreements	–	1	–	1
Trading assets	124	288	3,879	4,291
Derivative assets	86	5,199	2,976	8,261
Financial investments	–	9	5	14
Margin money and settlement assets	–	–	4	4
Held for sale and other assets	–	–	300	300
Due from subsidiaries(1)	–	84	–	84
Due from related body corporate entities(1)	–	2	–	2
Total Asia Pacific	**210**	**5,583**	**7,164**	**12,957**
Europe, Middle East and Africa				
Cash collateralised lending and reverse repurchase agreements	–	2,805	–	2,805
Trading assets	11	101	2211	2323
Derivative assets	–	12,015	34,187	46,202
Held for sale and other assets	–	–	366	366
Loan assets	–	32	22	54
Due from subsidiaries(1)	–	7966	232	8198
Due from related body corporate entities(1)	–	–	7	7
Total Europe, Middle East and Africa	**11**	**22,919**	**37,025**	**59,955**
Americas				
Cash collateralised lending and reverse repurchase agreements	–	1,364	–	1,364
Trading assets	299	–	100	399
Derivative assets	4	12,301	4,029	16,334
Margin money and settlement assets	–	–	–	–
	–	–	168	168
Loan assets	–	–	52	52
Due from subsidiaries(1)	–	3,544	–	3,544
Due from related body corporate entities(1)	–	5	–	5
Total Americas	**303**	**17,214**	**4,349**	**21,866**
Total gross credit risk	**531**	**50,065**	**51,295**	**101,891**

(1) Due from related body corporates and subsidiaries have been presented as Financial institutions and Other based on APRA's Standard Institutional Sector Classifications of Australia (SISCA) classification.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Maximum exposure to credit risk

For on-balance sheet instruments, the maximum exposure to credit risk is the carrying amount reported on the balance sheet (refer to Note 34 *Measurement categories of financial instruments*). For off balance sheet instruments, the maximum exposure to credit risk is a function of the contractual notional amount except for certain usage-based guarantees in which case the maximum exposure is determined with respect to the fair value of the underlying exposure and is disclosed in Note 12 *Expected credit losses*.

Collateral and credit enhancements held

Cash collateralised lending and reverse repurchase agreements

The Consolidated Entity enters into stock and commodity borrowing and reverse repurchase transactions with counterparties which require lodgement of collateral. These arrangements includes:

- securities and commodities borrowed in return for cash, for which the fair value of the securities and commodities borrowed is equal to or less than the cash deposited with the counterparty
- reverse repurchase agreements (collateralised financing arrangements) for which the fair value of the securities and commodities received as collateral generally in excess of the principal amount
- securities received as collateral in return for the transfer of other securities
- securities borrowed on an unsecured basis in return for a fee.

The non-cash collateral received is not recognised by the Consolidated Entity in the Statements of financial position, as the risks and rewards of ownership remain with the counterparty. The Consolidated Entity is permitted to sell or repledge the securities and commodities received. In the absence of default by the counterparty, the Consolidated Entity has an obligation to return the non-cash collateral received to counterparty.

For securities and commodities borrowed in return for cash and reverse repurchase arrangements, the fair value of non-cash collateral received by the Consolidated Entity is $44,636 million (2022: $43,233 million) and the Company is $48,421 million (2022: $41,380 million).

For securities borrowed in return for other securities, the fair value of the securities received by the Consolidated Entity is $11,801 million (2022: $8,877 million) and by the Company is $10,626 million (2022: $8,868 million).

For securities borrowed on an unsecured basis, the fair value of the securities received by the Consolidated Entity is $7,899 million (2022: $6,199 million) and the Company is $3,957 million (2022: $3,855 million).

Out of the above, the fair value of securities repledged by the Consolidated Entity is $20,893 million (2022: $18,526 million) and by the Company is $20,747 million (2022: $18,518 million).

The fair value attributed to non-cash collateral held is judgemental and measured with reference to quoted prices in active markets where available (for example, listed securities). If quoted prices in active markets are not available, the fair value are estimated using pricing models or other recognised valuation techniques that maximise the use of quoted prices and observable market inputs.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Loan assets

Home loans

Macquarie purchases risk protection for its home loans portfolio. Prior to 2017 this was in the form of Lenders Mortgage Insurance (LMI) from a well rated Australian LMI provider. Since then Macquarie has diversified its risk protection coverage to a global panel of reinsurers with diverse lines of business coverage and ratings ranging from AA+ to A– from external rating agencies. The length of risk protection cover is up to 10 years from the year of origination with the type of cover including excess of loss and quota share.

The following table provides information on the loan to collateral value ratio as determined using loan carrying values and the most recent valuation of the home loan collateral.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Australia				
<= 25%	**3,818**	2,966	**3,818**	2,961
>25% to 50%	**24,214**	19,009	**24,214**	18,990
>50% to 70%	**47,851**	39,889	**47,851**	39,857
>70% to 80%	**35,117**	29,232	**35,117**	29,221
>80% to 90%	**2,911**	3,171	**2,911**	3,170
>90% to 100%	**382**	547	**382**	547
Partly collateralised	**27**	32	**27**	32
Total home loans	**114,320**	94,846	**114,320**	94,778

Asset financing

The Consolidated Entity leases assets and provides asset-related financing, to corporate and retail clients. Titles to the underlying assets are held by the Consolidated Entity as collateral. Of the asset finance portfolio of $6,904 million (2022: $9,858 million), the credit exposure after considering the depreciated value of collateral is $3,020 million (2022: $4,217 million). For the Company, of the asset finance portfolio of $6,010 million (2022: $8,451 million), the credit exposure after considering the depreciated value of collateral is $2,545 million (2022: $3,552 million).

Corporate, commercial and other lending

Collateral held against corporate, commercial and other lending consists of secured positions over assets of the counterparty, often in the form of corporate assets. For the Consolidated Entity, of the term lending of $20,536 million (2022: $18,300 million), the credit exposure after considering the estimated value of collateral and credit enhancements is $2,514 million (2022: $2,116 million). For the Company, of the term lending of $19,755 million (2022: $17,950 million), the credit exposure after the estimated value of collateral and credit enhancements is $2,103 million (2022: $1,952 million).

Derivative instruments

Derivatives may be traded on an exchange (exchange traded) or they may be privately negotiated contracts, which are referred to as Over-the-Counter (OTC) derivatives. The Consolidated Entity's and Company's OTC derivatives are cleared and settled either through central clearing counterparties (OTC-cleared), or bilateral contracts between two counterparties.

The Consolidated Entity's approach to financial risk management includes entering into margining and collateralisation arrangements and enforceable master netting arrangements (MNA) with counterparties. The MNAs allow for net settlement with counterparties in the event of default or other pre-determined events, such that their potential effects on the Consolidated Entity's financial position in that circumstance is to settle these contracts as one arrangement.

Refer to Note 36 *Offsetting of financial assets and financial liabilities* for impact of master netting arrangements and margins and other financial collateral held against the positions as at balance date.

Note 33
Financial risk management continued

Note 33.1 Credit risk continued

Financial investments

Debt securities held by the Consolidated Entity carrying a credit risk are primarily in nature of bonds, NCD, floating rate notes (FRN), commercial paper and other debt securities for liquidity management purposes and other securities for short-term gains.

The Consolidated Entity utilises Credit Default Swaps, guarantees and other forms of credit enhancements or collateral in order to minimise the exposure to this credit risk.

Settlement assets

Security and commodity settlements of $1,876 million (2022: $1,029 million) and $3,530 million (2022: $4,294 million) in the Consolidated Entity and $1,886 million (2022: $979 million) and $2,095 million (2022: $2,926 million) in the Company, presented under Margin money and settlement assets represent amounts owed by the exchange (or a client) for equities (or bought on behalf of a client), other commodities and securities sold.

These assets are collateralised with the underlying equity securities, commodities or cash held by the Consolidated Entity and the Company until the date of settlement. The period between trade and settlement date varies as per regional regulatory and business norms.

Other financial assets

Commodity related receivables under other financial assets are typically either collateralised with underlying commodity held by the Consolidated Entity until the date of settlement or short-term receivables with standard credit terms which would be backed by a bank guarantee where required to remain within credit limits.

Due from subsidiaries and guarantees received

The Company's balances with its subsidiaries and guarantees provided are based on standard terms and are fully or partially collateralised. The Company's exposures with certain Non-ELE subsidiaries included in amounts due from subsidiaries are secured through cash collateralised guarantees of $6,286 million (2022: $4,953 million) provided by MFHPL and $3,749 million (2022: $2,664 million) provided by MIFL. Refer to Note 27 *Related party information* and Note 36 *Offsetting of financial assets and financial liabilities* for details.

Due from related body corporate entities and guarantees received

The Consolidated Entity's and Company's exposures with its related body corporate entities and guarantees provided are based on standard terms and are fully or partially collateralised. Refer to Note 27 *Related party information* and Note 36 *Offsetting of financial assets and financial liabilities* for details.

Credit commitments

Undrawn facilities and lending commitments of $22,534 million (2022: $22,362 million) in the Consolidated Entity and $21,427 million (2022: $25,890 million) in the Company are secured through collateral and credit enhancement. The remaining credit exposure after considering the estimated value of collateral is $2,836 million (2022: $2,711 million) in the Consolidated Entity and $4,192 million (2022: $2,668 million) in the Company.

Additional collateral

Apart from the collateral detail disclosed above, the Consolidated Entity and the Company also holds other types of collateral, such as unsupported guarantees.

While such mitigants have value as a credit risk mitigant often providing rights in insolvency, their assignable values are uncertain and therefore are assigned no value for disclosure purposes.

Repossessed collateral

In the event of a customer default, the Consolidated Entity may either take possession of the underlying collateral held as security and/or exercise its right to dispose of the customer's asset. At the reporting date the Consolidated Entity did not have any material amounts of such collateral recognised in its Statements of financial position.

Note 33.2 Liquidity risk

Governance and oversight

Macquarie Bank's liquidity risk management framework is designed to ensure that it is able to meet its obligations as they fall due under a range of market conditions.

Liquidity management is performed centrally by Group Treasury, with oversight from the MBL Asset and Liability Committee (ALCO), the MBL Board and RMG. Macquarie Bank's liquidity policy is approved by the MBL Board after endorsement by the ALCO and liquidity reporting is provided to the Board on a regular basis. The MBL ALCO includes the MGL CEO, MBL CEO, CFO, CRO, COO, Group General Counsel, Co-Heads of Group Treasury and relevant Operating Group Heads.

RMG provides independent oversight of liquidity risk management, including ownership of liquidity policies and key limits and approval of material liquidity scenario assumptions.

Liquidity policy and risk appetite

The *MBL Liquidity Policy* is designed so that the Bank Group maintains sufficient liquidity to meet its obligations as they fall due.

The *MBL Liquidity Policy* outlines the standalone framework for the Bank Group and its principles are consistent with the *MGL Liquidity Policy*.

Macquarie Bank's liquidity risk appetite is intended to ensure that Macquarie Bank is able to meet all of its liquidity obligations during a period of liquidity stress: a twelve month period with constrained access to funding markets and with only a limited reduction in Macquarie Bank's franchise businesses. MBL is an authorised deposit-taking institution and is funded mainly with capital, long-term liabilities and deposits.

Note 33
Financial risk management continued

Note 33.2 Liquidity risk continued

Liquidity contingency plan

Group Treasury maintains a *Liquidity Contingency Plan* for MBL, which outlines how a liquidity crisis would be managed. The plan defines roles and responsibilities and actions to be taken in a liquidity event, including identifying key information requirements and appropriate communication plans with both internal and external parties.

Specifically, the plan details:

- factors that may constitute a crisis
- the officers responsible for enacting the plan
- a committee of senior executives responsible for managing a crisis
- the information required to effectively manage a crisis
- a communications strategy
- a high level checklist of possible actions to conserve or raise additional liquidity
- contact lists to facilitate prompt communication with all key internal and external stakeholders.

In addition, Macquarie Bank monitors a range of early warning indicators on a daily basis that might assist in identifying emerging risks in Macquarie Bank's liquidity position. These indicators are reviewed by Senior Management and are used to inform any decisions regarding invoking the plan.

The *Liquidity Contingency Plan* is subject to regular review by both Group Treasury and RMG. It is submitted annually to the MBL ALCO and the MBL Board for approval.

Macquarie Bank is a global financial institution, with branches and subsidiaries in a variety of countries. Regulations in certain countries may require some branches or subsidiaries to have specific local contingency plans. Where that is the case, the *Liquidity Contingency Plan* contains either a supplement or reference to a separate document providing the specific information required for those branches or subsidiaries.

Funding strategy

Macquarie Bank prepares a *Funding Strategy* for MBL on an annual basis and monitors progress against the strategy throughout the year.

The *Funding Strategy* aims to maintain Macquarie Bank's diversity of funding sources, ensure ongoing compliance with all liquidity requirements and facilitate forecast asset growth.

The *Funding Strategy* is reviewed by the MBL ALCO and approved by the MBL Board.

Scenario analysis

Scenario analysis is central to Macquarie Bank's liquidity risk management framework. In addition to regulatory defined scenarios, Group Treasury models additional liquidity scenarios covering both market-wide and Macquarie Bank name-specific crises.

These scenarios use a range of assumptions, which Macquarie Bank intends to be conservative, regarding the level of access to capital markets, deposit outflows, contingent funding requirements and asset sales.

As an example, one internal scenario projects the expected cash and liquid asset position during a combined market-wide and Macquarie Bank name-specific crisis over a twelve month time frame. This scenario assumes no access to wholesale funding markets, a significant loss of customer deposits and contingent funding outflows resulting from undrawn commitments, market moves impacting derivatives and other margined positions combined with a multiple notch credit rating downgrade. Macquarie Bank's cash and liquid asset portfolio must exceed the minimum requirement as calculated in this scenario at all times.

Liquid asset holdings

Group Treasury centrally maintains a portfolio of highly liquid unencumbered assets which are intended to ensure adequate liquidity is available under a range of market conditions. The minimum level of cash and liquid assets is calculated with reference to internal scenario analysis and regulatory requirements.

The cash and liquid asset portfolio contains only unencumbered assets that can be relied on to maintain their liquidity in a crisis scenario. Specifically, cash and liquid assets held to meet minimum internal and regulatory requirements must be cash balances (including central bank reserves and overnight lending to financial institutions), qualifying High-Quality Liquid Assets and other Reserve Bank of Australia (RBA) repo eligible securities. Composition constraints are also applied to ensure appropriate diversity and quality of the assets in the portfolio. The cash and liquid asset portfolio is held in a range of currencies consistent with the distribution of liquidity needs by currency, allowing for an acceptable level of currency mismatches.

Funds transfer pricing

An internal funds transfer pricing framework is in place that has been designed to produce appropriate incentives for business decision-making by reflecting the funding costs arising from business actions and the separate funding tasks and liquidity requirements of the Bank Group. Under this framework, each business is allocated the full cost of the funding required to support its products and business lines, recognising the actual and contingent funding-related exposures their activities create. Businesses that raise funding are compensated at a level that is appropriate for the liquidity benefit provided by the funding.

Note 33
Financial risk management continued

Note 33.2 Liquidity risk continued

Contractual undiscounted cash flows

The following tables summarise the maturity profile of the Consolidated Entity's financial liabilities as at 31 March based on a contractual undiscounted repayment basis and hence would vary from the carrying value as reported in the Statements of financial position at the balance date. Repayments subject to notice are treated as if notice were given immediately. This does not reflect the behaviour of the expected cash flows as indicated by the Consolidated Entity's deposit retention history since the Consolidated Entity expects that many customers will not request repayment on the earliest date the Consolidated Entity could be required to pay.

	Statements of financial position carrying value $m	On demand $m	0 to 3 months $m	3 to 12 months $m	1 to 5 years $m	More than 5 years $m	Total $m
							CONSOLIDATED 2023
Cash collateralised borrowing and repurchase agreements	18,737	269	7,076	1,759	9,657	–	18,761
Trading liabilities[1]	4,754	–	4,754	–	–	–	4,754
Margin money and settlement liabilities	21,913	17,086	4,827	–	–	–	21,913
Derivative liabilities (trading)[1]	31,322	–	31,322	–	–	–	31,322
Derivative liabilities (hedge accounting relationships)[2]:	1,200						
Contractual amount payable		–	364	595	2,840	324	4,123
Contractual amount receivable		–	(200)	(308)	(2,164)	(152)	(2,824)
Deposits	134,648	111,023	12,689	10,671	722	–	135,105
Other liabilities	2,946	500	1,449	444	453	149	2,995
Borrowings	8,103	521	3,057	496	4,814	–	8,888
Issued debt securities[3]	57,979	–	15,037	20,973	21,471	4,223	61,704
Due to other related body corporate entities	14,405	5,208	2,840	71	6,287	–	14,406
Loan capital[4]	9,523	–	134	404	6,686	5,256	12,480
Total	**305,530**	**134,607**	**83,349**	**35,105**	**50,766**	**9,800**	**313,627**
Total undiscounted contingent liabilities and commitments[5]		**19,297**	**2,241**	**967**	**1,497**	**685**	**24,687**

(1) Derivative liabilities (trading) and trading liabilities are included in the '0 to 3 months' at their fair value. Liquidity risk on these items is not managed on the basis of contractual maturity, as they are frequently traded.
(2) Where multiple derivatives are combined in order to form a single hedge instrument designated in a hedge accounting relationship, each derivative is considered independently for the purposes of assessing liquidity risk and for the disclosure requirements.
(3) Includes $11,424 million payables to SE note holders which is disclosed on the basis of expected maturity of the notes which are dependent on the repayment of the underlying loans that the SE holds.
(4) Includes securities with conditional repayment obligations. The cash outflow on the principal component on these securities is disclosed using the earliest optional exchange dates and the cash outflow of the interest component is disclosed using coupon dates instead of the contractual maturity. For contractual maturity of these securities, refer to Note 23 *Loan capital*, further these instruments may be converted into ordinary shares on the occurrence of an other exchange event, and this may impact their maturity profile.
(5) Cash flows on contingent liabilities and commitments are dependent on the occurrence of various future events and conditions and may or may not result in an outflow of resources.

Note 33
Financial risk management continued

Note 33.2 Liquidity risk continued

	Statements of financial position carrying value $m	On demand $m	0 to 3 months $m	3 to 12 months $m	1 to 5 years $m	More than 5 years $m	Total $m
							CONSOLIDATED 2022
Cash collateralised borrowing and repurchase agreements	16,947	55	5,479	142	11,297	–	16,973
Trading liabilities[1]	5,206	–	5,206	–	–	–	5,206
Margin money and settlement liabilities	21,577	16,172	4,873	532	–	–	21,577
Derivative liabilities (trading)[1]	83,584	–	83,584	–	–	–	83,584
Derivative liabilities (hedge accounting relationships)[2]:	607						
Contractual amount payable		–	482	194	1,459	683	2,818
Contractual amount receivable		–	(460)	(167)	(970)	(541)	(2,138)
Deposits	101,614	93,077	5,210	3,089	305	15	101,696
Other liabilities	2,184	113	1,396	377	295	23	2,204
Borrowings	5,713	446	1,624	72	3,686	24	5,852
Issued debt securities[3]	72,107	–	19,313	25,420	17,515	11,376	73,624
Due to other related body corporate entities	11,548	3,608	2,766	207	4,976	–	11,557
Loan capital[4]	6,896	–	64	218	2,031	6,395	8,708
Total	327,983	113,471	129,537	30,084	40,594	17,975	331,661
Total undiscounted contingent liabilities and commitments[5]		15,764	3,457	693	2,939	1,566	24,419

(1) Derivative liabilities (trading) and trading liabilities are included in the '0 to 3 months' at their fair value. Liquidity risk on these items is not managed on the basis of contractual maturity, as they are frequently traded.
(2) Where multiple derivatives are combined in order to form a single hedge instrument designated in a hedge accounting relationship, each derivative is considered independently for the purposes of assessing liquidity risk and for the disclosure requirements.
(3) Includes $13,380 million payables to SE note holders which is disclosed on the basis of expected maturity of the notes which are dependent on the repayment of the underlying loans that the SE holds.
(4) Includes securities with conditional repayment obligations. The cash outflow on the principal component on these securities is disclosed using the earliest optional exchange dates and the cash outflow of the interest component is disclosed using coupon dates instead of the contractual maturity. For contractual maturity of these securities, refer to Note 23 *Loan capital*, further these instruments may be converted into ordinary shares on the occurrence of an other exchange event, and this may impact their maturity profile.
(5) Cash flows on contingent liabilities and commitments are dependent on the occurrence of various future events and conditions and may or may not result in an outflow of resources.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 33
Financial risk management continued

Note 33.2 Liquidity risk continued

	Statements of financial position carrying value $m	On demand $m	0 to 3 months $m	3 to 12 months $m	1 to 5 years $m	More than 5 years $m	Total $m
							COMPANY 2023
Cash collateralised borrowing and repurchase agreements	17,928	29	6,613	1,759	9,551	–	17,952
Trading liabilities(1)	4,757	–	4,757	–	–	–	4,757
Margin money and settlement liabilities	17,363	13,535	3,828	–	–	–	17,363
Derivative liabilities (trading)(1)	26,224	–	26,224	–	–	–	26,224
Derivative liabilities (hedge accounting relationships)(2):	1,197						
Contractual amount payable		–	325	565	3,097	301	4,288
Contractual amount receivable		–	(169)	(287)	(2,403)	(118)	(2,977)
Deposits	133,661	110,941	11,854	10,615	704	–	134,114
Other liabilities	1,762	501	913	86	217	46	1,763
Borrowings	2,429	476	1,797	185	2	–	2,460
Issued debt securities	46,581	–	13,976	19,143	14,573	1,281	48,973
Due to subsidiaries	28,711	9,063	5,262	1,411	10,142	2,874	28,752
Due to other related body corporate entities	12,313	5,168	862	71	6,212	–	12,313
Loan capital(3)	9,523	–	134	404	6,686	5,256	12,480
Total	**302,449**	**139,713**	**76,376**	**33,952**	**48,781**	**9,640**	**308,462**
Total undiscounted contingent liabilities and commitments(4)		**16,058**	**4,436**	**919**	**1,308**	**298**	**23,019**

(1) Derivative liabilities (trading) and trading liabilities are included in the '0 to 3 months' at their fair value. Liquidity risk on these items is not managed on the basis of contractual maturity, as they are frequently traded.
(2) Where multiple derivatives are combined in order to form a single hedge instrument designated in a hedge accounting relationship, each derivative is considered independently for the purposes of assessing liquidity risk and for disclosure requirements.
(3) Includes securities with conditional repayment obligations. The cash outflow on the principal component on these securities is disclosed using the earliest optional exchange dates and the cash outflow of the interest component is disclosed using coupon dates instead of the contractual maturity. For contractual maturity of these securities, refer to Note 23 *Loan capital*, further these instruments may be converted into ordinary shares on the occurrence of an other exchange event, and this may impact their maturity profile.
(4) Cash flows on contingent liabilities and commitments are dependent on the occurrence of various future events and conditions and may or may not result in an outflow of resources.

Note 33
Financial risk management continued

Note 33.2 Liquidity risk continued

	Statements of financial position carrying value $m	On demand $m	0 to 3 months $m	3 to 12 months $m	1 to 5 years $m	More than 5 years $m	Total $m
							COMPANY 2022
Cash collateralised borrowing and reverse repurchase agreements	16,947	55	5,479	142	11,297	–	16,973
Trading liabilities[1]	5,210	–	5,210	–	–	–	5,210
Margin money and settlement liabilities	15,593	11,575	3,637	381	–	–	15,593
Derivative liabilities (trading)[1]	70,988	–	70,988	–	–	–	70,988
Derivative liabilities (hedge accounting relationships)[2]:	533						
Contractual amount payable		–	372	163	1,292	676	2,503
Contractual amount receivable		–	(363)	(146)	(852)	(535)	(1,896)
Deposits	101,417	93,034	5,109	3,086	255	–	101,484
Other liabilities	1,211	91	982	87	52	–	1,212
Borrowings	2,787	446	1,605	8	743	–	2,802
Issued debt securities	58,722	–	18,622	24,656	15,490	1,212	59,980
Due to subsidiaries	36,566	7,739	16,655	8	48	12,118	36,568
Due to other related body corporate entities	10,203	3,610	1,621	6	4,976	–	10,213
Loan capital[3]	6,896	–	64	218	2,031	6,395	8,708
Total	327,073	116,550	129,981	28,609	35,332	19,866	330,338
Total undiscounted contingent liabilities and commitments[4]		12,025	10,836	605	2,925	1,551	27,942

(1) Derivative liabilities (trading) and trading liabilities are included in the '0 to 3 months' at their fair value. Liquidity risk on these items is not managed on the basis of contractual maturity, as they are frequently traded.
(2) Where multiple derivatives are combined in order to form a single hedge instrument designated in a hedge accounting relationship, each derivative is considered independently for the purposes of assessing liquidity risk and for disclosure requirements.
(3) Includes securities with conditional repayment obligations. The cash outflow on the principal component on these securities is disclosed using the earliest optional exchange dates and the cash outflow of the interest component is disclosed using coupon dates instead of the contractual maturity. For contractual maturity of these securities, refer to Note 23 *Loan capital*, further these instruments may be converted into ordinary shares on the occurrence of another exchange event, and this may impact their maturity profile.
(4) Cash flows on contingent liabilities and commitments are dependent on the occurrence of various future events and conditions and may or may not result in an outflow of resources.

Note 33
Financial risk management continued

Note 33.3 Market risk

Macquarie's balance sheet includes a **'trading book'**, which is defined in accordance with APRA's traded market risk prudential statement (APS116), and subject to the traded market risk framework. Any position not deemed to be trading book is considered to be **'banking book'**, and covered by either the non-traded market risk or equity risk frameworks.

Traded market risk

Market risk is the risk of adverse changes in the value of the Consolidated Entity's trading positions as a result of changes in market conditions. The Consolidated Entity is exposed to the following risks:

- **price**: The risk of loss due to changes in price of a risk factor (interest rates, foreign exchange, commodities etc.)
- **volatility**: The risk of loss due to changes in the volatility of a risk factor
- **basis**: Risk of imperfect correlation between offsetting investments in a hedging strategy
- **correlation**: Risk that the actual correlation between two assets or variables is different from the assumed correlation
- **illiquid market**: Risk of inability to sell assets or close out positions in thinly-traded markets at close to the last market prices
- **concentration**: Risk of over concentration of trading exposures in certain markets and products
- **valuation adjustments**: Risk of actual valuation adjustments to derivative positions; specifically Credit Valuation Adjustment, Debit Valuation Adjustment and Funding Valuation Adjustment (FVA).

It is recognised that all trading activities contain calculated elements of risk taking. The Consolidated Entity is prepared to accept such risks provided they are within agreed limits, independently and correctly identified, calculated and monitored by RMG, and reported to Senior Management on a regular basis.

RMG monitors positions within the Consolidated Entity according to a limit structure which sets limits for all exposures in all markets. Limits are for both individual trading desks and divisions as well as in aggregate.

RMG sets three complementary limit structures:

- **contingent loss limits**: Worst-case scenarios that shock prices and volatilities by more than that which has occurred historically. Multiple scenarios are set for each market to capture the non-linearity and complexity of exposures arising from derivatives. A wide range of assumptions about the correlation between markets is applied
- **position limits**: Volume, maturity and open position limits are set on a large number of market instruments and securities in order to constrain concentration risk and to avoid the accumulation of risky, illiquid positions
- **Value-at-Risk (VaR) limits**: A statistical measure based on a 10-day holding period and a 99% confidence level, as stipulated by the APRA capital adequacy standard. The model is validated daily by back testing a one-day VaR against hypothetical and actual daily trading profit or loss.

Note 33
Financial risk management continued

Note 33.3 Market risk continued

Value-at-Risk figures (1 day, 99% confidence level)

The table below shows the average, maximum and minimum VaR over the financial year for the major markets in which the Consolidated Entity and Company operate. The VaR shown in the table is based on a one-day holding period, being the mark-to-market loss that could be incurred over that period. The aggregated VaR is on a correlated basis.

	2023			2022		
	Average $m	**Maximum $m**	**Minimum $m**	Average $m	Maximum $m	Minimum $m
						CONSOLIDATED
Equities	**3.73**	**7.14**	**1.36**	3.28	5.44	1.52
Interest rates	**6.19**	**11.24**	**2.11**	2.93	5.96	1.71
Foreign exchange	**4.06**	**9.82**	**0.90**	1.73	3.39	0.83
Commodities and Commodity contracts	**52.95**	**116.87**	**33.98**	29.90	52.27	14.97
Aggregate	**53.51**	**113.28**	**34.49**	30.19	53.23	14.61
						COMPANY
Equities	**3.71**	**7.03**	**1.37**	3.28	5.42	1.55
Interest rates	**6.95**	**11.47**	**2.30**	2.69	5.35	1.61
Foreign exchange	**5.05**	**29.32**	**1.67**	3.65	8.48	1.09
Commodities and Commodity contracts	**27.19**	**43.25**	**20.07**	20.85	37.08	10.41
Aggregate	**28.39**	**42.93**	**19.53**	21.92	37.12	10.85

Note 33
Financial risk management continued

Note 33.3 Market risk continued

Value-at-Risk

The VaR model uses a Monte Carlo simulation where price and volatility paths are derived from multiple normal distributions, based on three years of historical data. The following factors can limit the effectiveness of VaR in predicting future price moves:

- the use of historical data means that the current model parameters may not reflect future market conditions, especially when entering a period of heightened volatility. The model utilises exponential weighting to place emphasis on the most recent market movements to more accurately reflect current conditions
- VaR focuses on unexceptional price moves so that it does not account for losses that could occur beyond the 99% level of confidence.

For capital adequacy purposes, debt-specific risk is measured using APRA's standard method, whilst all other exposures are captured by the VaR model. This combined approach has been approved by APRA and is subject to periodic review.

Non-traded market risk

The Consolidated Entity and the Company have exposure to non-traded market risks arising from transactions entered into during its normal course of business and as a result of its investments in foreign operations. These risks include:

- **interest rate**: Changes in the level, shape and volatility of yield curves, and/or client behaviour given these changes
- **foreign exchange**: Changes in the spot exchange rates.

The Consolidated Entity has limited appetite for non-traded market risks. Where commercially feasible, these risks are transferred into the trading books of CGM and Group Treasury and governed within the traded market risk framework described above. Responsibility for managing exposures rests with individual businesses, with independent monitoring performed by RMG and FMG.

Accounting considerations arising from hedging activities

The use of derivative and other financial instruments to hedge non-traded positions potentially gives rise to income statement volatility due to difference in accounting treatments. The Consolidated Entity manages this through hedge accounting as set out in Note 41(x) *Derivative instruments and hedging activities* and Note 32 *Hedge accounting*.

Interest rate risk in the banking book (IRRBB)

Macquarie measures and monitors interest rate risk on both an economic value and earnings basis, which are modelled as the worst-case contingent loss from a set of six severe interest rate shocks, including both parallel and non-parallel shocks. Aggregate IRRBB exposures for the Consolidated Entity are constrained on both measures:

- **Economic Value Sensitivity (EVS)**: The EVS metric measures the change in net present value of the interest-bearing portfolios in the banking book as a result of changes in interest rates
- **Earnings at Risk (EaR)**: The EaR model constrains the impact on reported net income over 12 months for a change in interest rates.

A central objective of the Consolidated Entity's *Non-traded Market Risk Policy* is to reduce earnings volatility to interest rate movements. A key component of this arises where shareholders equity invested in interest bearing assets are managed by holding a portfolio of 'receive fixed' interest rate swaps. The duration of this hedging program is governed as part of the capital management strategy, and subject to independent oversight by RMG.

Note 33
Financial risk management continued

Note 33.3 Market risk continued

Foreign exchange risk

The Consolidated Entity is active in various currencies globally. A key objective of the Consolidated Entity's *Non-traded Market Risk Policy* is to reduce this sensitivity of regulatory capital ratios to foreign currency movements.

This is achieved by leaving specific investments in foreign operations exposed to foreign currency translation movements and captured in the foreign currency translation reserve, a component of regulatory capital, which aligns the foreign exchange sensitivity of capital supply with that of foreign currency capital requirements.

The table below presents the sensitivity of the Consolidated Entity's net investment in foreign operations to the most material currencies. As a result of the policy described above, these movements will not have a material impact on the capital ratios.

	2023		2022	
	Movement in exchange rates %	**Sensitivity of other comprehensive income after tax $m**	Movement in exchange rates %	Sensitivity of other comprehensive income after tax $m
				CONSOLIDATED
United States dollar	**+10**	**(555)**	+10	(405)
Pound sterling	**+10**	**(84)**	+10	(46)
Canadian dollar	**+10**	**-**	+10	(10)
Total		**(639)**		(461)
United States dollar	**-10**	**679**	-10	495
Pound sterling	**-10**	**103**	-10	56
Canadian dollar	**-10**	**-**	-10	13
Total		**782**		564
				COMPANY
United States dollar	**+10**	**(555)**	+10	(405)
Pound sterling	**+10**	**(84)**	+10	(46)
Canadian dollar	**+10**	**-**	+10	(10)
Total		**(639)**		(461)
United States dollar	**-10**	**679**	-10	495
Pound sterling	**-10**	**103**	-10	56
Canadian dollar	**-10**	**-**	-10	13
Total		**782**		564

Note 33
Financial risk management continued

Note 33.3 Market risk continued

Interest rate risk – Interest Rate Benchmark Reform (IBOR)

During 2018, the Consolidated Entity initiated a group-wide project, sponsored by its Chief Financial Officer (CFO), to manage the impacts of IBOR reform, including overseeing the transition from LIBOR to ARRs. A group-wide steering committee was established with its key responsibility being the governance of the project and comprised of senior executives from the Consolidated Entity's Operating Groups, Financial Management Group (FMG), Risk Management Group (RMG), Corporate Operations Group (COG) and Legal and Governance Group (LGG).

The Consolidated Entity's reform project oversaw the successful transition of contracts referencing LIBORs that ceased publication on 31 December 2021 in accordance with industry and regulatory guidance.

The remaining transition focus is on the USD LIBOR tenors and IBOR for other minor currencies that will cease publication on 30 June 2023, and the Canadian Dollar Offered Rate (CDOR) which will cease publication on 28 June 2024. The Consolidated Entity has actively begun to engage with clients to support them through the transition from USD LIBOR to SOFR.

Whilst the transition of legacy USD LIBOR contracts continues to expose the Consolidated Entity to inherent risks (including those outlined below), the remaining IBOR transition efforts and risk has significantly reduced. The Consolidated Entity's IBOR transition governance was decentralised from 1 April 2022, commensurate with the risk. Under the decentralised governance model, central oversight was reduced and operating groups manage remaining IBOR transition risks within the Consolidated Entity's existing risk management framework.

The Consolidated Entity is exposed to inherent risks arising from transition of legacy USD LIBOR contracts, including but not limited to:

- **financial risk**: This includes
  - (i) value transfers arising from the transition to ARRs,
  - (ii) basis risk from products and IBORs transitioning at different times,
  - (iii) impacts arising from a change in accounting treatment including hedge accounting, capital, tax and reported earnings
  - (iv) loss in revenue/market share from not being ready to participate in ARR markets
- **conduct risk**: This includes
  - (i) real or perceived benefit of information asymmetry between financial institutions and clients during transition,
  - (ii) real or perceived unfair treatment of clients during transition
  - (iii) market participants attempt to influence ARRs during transition or misconduct in markets where there is insufficient liquidity
- **legal risk**: This includes
  - (i) client disputes over amendment terms
  - (ii) litigation from clients and counterparties (including potential class actions) due to inappropriate/unenforceable contractual terms or losses from transition
- **operational risk**: This includes
  - (i) infrastructure and processes that result in errors upon transition
  - (ii) reduced model accuracy due to lack of historical data.

Whilst IBOR reforms, including the transition from LIBOR to ARRs, are important changes for the Consolidated Entity, they have not resulted in changes to the Consolidated Entity's risk management strategy and these risks are managed within the existing risk management framework.

Exposure yet to be transitioned to ARRs: The notional value of the Consolidated Entity's and the Company's financial instruments which are yet to transition to ARRs as at the reporting date includes:

- **derivatives**: The Consolidated Entity had gross exposures of $80,713 million in USD LIBOR and $4,197 million in other currencies (2022: $80,006 million in USD LIBOR and $279 million in other currencies). The Company had gross exposures of $80,713 million in USD LIBOR and $4,197 million in other currencies (2022: $80,006 million in USD LIBOR and $279 million in other currencies)
- **non-derivative financial assets**: The Consolidated Entity had exposures of $995 million in USD LIBOR (2022: $2,913 million in USD LIBOR and $21 million in other currencies). The Company had exposures of $995 million in USD LIBOR (2022: 2,913 million in USD LIBOR and $21 million in other currencies)
- **non-derivative financial liabilities**: The Consolidated Entity had exposures of $367 million in USD LIBOR (2022: $553 million). The Company had exposures of $314 million in USD LIBOR (2022: $486 million).

The scope of the above-mentioned exposures has been determined as follows:

- the benchmark will be replaced, and the replacement date is known. Only exposures with contractual maturities extending beyond the replacement date have been included
- the gross notional values for derivatives and both on-balance sheet and off-balance sheet exposures have been included
- for contracts that reference more than one benchmark, such as a cross currency swap, the exposure includes both benchmarks to reflect the absolute exposure to different reference rates
- derivative contracts of $4,713 million (2022: $8,479 million) designated in hedge accounting relationships have synthetically transitioned and have been excluded, primarily relating to USD LIBOR to SOFR transition.

Note 34

Measurement categories of financial instruments

The following table contains information relating to the measurement categories (i.e. Held for trading (HFT), FVTPL, DFVTPL, FVOCI or Amortised cost) of assets and liabilities of the Consolidated Entity. The descriptions of measurement categories are included in Note 41(vii) *Financial instruments*.

The methods and significant assumptions that have been applied in determining the fair values of assets and liabilities are disclosed in Note 35 *Fair value of assets and liabilities*.

	FINANCIAL INSTRUMENTS CARRIED AT							FAIR VALUE OF ITEMS CARRIED AT	
	FAIR VALUE								
	HFT $m	DFVTPL $m	FVTPL $m	FVOCI $m	Amortised cost $m	Non-financial instruments $m	Statements of financial position total $m	Fair value $m	Amortised cost $m
								CONSOLIDATED 2023	
Assets									
Cash and bank balances	-	-	-	-	41,612	-	41,612	-	41,612
Cash collateralised lending and reverse repurchase agreements	-	-	4,963	22,341	15,897	-	43,201	27,304	15,897
Trading assets[(1)]	14,174	-	-	-	-	1,618	15,792	15,792	-
Margin money and settlement assets	-	-	576	-	18,799	-	19,375	576	18,799
Derivative assets	34,759	-	1,061	-	-	-	35,820	35,820	-
Financial investments:									
Equity	-	-	265	-	-	-	265	265	-
Debt[(2)]	-	-	45	14,868	1,721	-	16,634	14,913	1,721
Held for sale and other assets	-	-	2,355	4	2,527	1,390	6,276	2,359	2,527
Loan assets[(2)]	-	-	285	-	141,475	-	141,760	285	140,872
Due from related body corporate entities[(3)]	3,379	-	-	-	556	486	4,421	3,379	556
Property, plant and equipment and right-of-use assets[(2)]	-	-	-	-	-	4,577	4,577	-	-
Deferred tax assets	-	-	-	-	-	1,088	1,088	-	-
Total assets	**52,312**	**-**	**9,550**	**37,213**	**222,587**	**9,159**	**330,821**	**100,693**	**221,984**
Liabilities									
Cash collateralised borrowing and repurchase agreements	-	277	-	-	18,460	-	18,737	277	18,460
Trading liabilities	4,754	-	-	-	-	-	4,754	4,754	-
Margin money and settlement liabilities	-	-	-	-	21,913	-	21,913	-	21,913
Derivative liabilities	31,423	-	1,099	-	-	-	32,522	32,522	-
Deposits	-	-	-	-	134,648	-	134,648	-	134,532
Other liabilities[(4)]	-	1,118	-	-	1,828	4,681	7,627	1,118	1,828
Borrowings	-	260	-	-	7,843	-	8,103	260	7,859
Due to related body corporate entities[(3)]	462	-	-	-	13,943	237	14,642	462	13,943
Issued debt securities[(2)]	-	1,351	-	-	56,628	-	57,979	1,351	56,515
Deferred tax liabilities	-	-	-	-	-	23	23	-	-
Loan capital[(2)]	-	-	-	-	9,523	-	9,523	-	9,355
Total liabilities	**36,639**	**3,006**	**1,099**	**-**	**264,786**	**4,941**	**310,471**	**40,744**	**264,405**

(1) Non-financial assets under 'Trading assets' represent commodities carried at fair value less costs to sell.
(2) Items measured at amortised cost or cost includes, where applicable, fair value hedge accounting adjustments for the designated hedged risk.
(3) Due from related body corporate entities and due to related body corporate entities includes derivatives and trading positions classified as HFT. All other intercompany receivables or payables are carried at amortised cost except for non-financial instruments.
(4) The fair value of other liabilities carried at amortised cost excludes lease liabilities.

Note 34
Measurement categories of financial instruments continued

	FINANCIAL INSTRUMENTS CARRIED AT							FAIR VALUE OF ITEMS CARRIED AT	
	FAIR VALUE								
	HFT $m	DFVTPL $m	FVTPL $m	FVOCI $m	Amortised cost $m	Non-financial instruments $m	Statements of financial position total $m	Fair value $m	Amortised cost $m
								CONSOLIDATED 2022	
Assets									
Cash and bank balances	–	–	–	–	48,972	–	48,972	–	48,972
Cash collateralised lending and reverse repurchase agreements	–	–	4,170	27,223	11,155	–	42,548	31,393	11,155
Trading assets[(1)]	8,601	–	–	–	–	3,118	11,719	11,719	–
Margin money and settlement assets	–	–	524	–	18,886	–	19,410	524	18,886
Derivative assets	84,171	–	445	–	–	–	84,616	84,616	–
Financial investments:									
Equity	–	–	255	–	–	–	255	255	–
Debt[(2)]	–	–	14	6,238	4	–	6,256	6,252	4
Held for sale other assets	–	–	1,677	–	2,158	1,155	4,990	1,676	2,158
Loan assets[(2)]	–	78	184	–	122,742	–	123,004	262	122,980
Due from other related body corporate entities[(3)]	1,741	–	–	–	1,399	285	3,425	1,741	1,399
Property, plant and equipment and right-of-use assets[(2)]	–	–	–	–	–	3,536	3,536	–	–
Deferred tax assets	–	–	–	–	–	897	897	–	–
Total assets	94,513	78	7,269	33,461	205,316	8,991	349,628	138,438	205,554
Liabilities									
Cash collateralised borrowing and repurchase agreements	–	241	–	–	16,706	–	16,947	241	16,706
Trading liabilities	5,206	–	–	–	–	–	5,206	5,206	–
Margin money and settlement liabilities	–	–	–	–	21,577	–	21,577	–	21,577
Derivative liabilities	83,584	–	607	–	–	–	84,191	84,191	–
Deposits	–	–	–	–	101,614	–	101,614	–	101,630
Other liabilities[(4)]	–	1,128	–	–	1,056	3,560	5,744	1,128	699
Borrowings	–	–	–	–	5,713	–	5,713	–	5,724
Due to related body corporate entities[(3)]	513	–	–	–	11,035	89	11,637	513	11,035
Issued debt securities[(2)]	–	1,585	–	–	70,522	–	72,107	1,585	70,494
Deferred tax liabilities	–	–	–	–	–	28	28	–	–
Loan capital[(2)]	–	–	–	–	6,896	–	6,896	–	7,027
Total liabilities	89,303	2,954	607	–	235,119	3,677	331,660	92,864	234,892

(1) Non-financial assets under 'Trading assets' represent commodities carried at fair value less costs to sell.
(2) Items measured at amortised cost or cost includes, where applicable, fair value hedge accounting adjustments for the designated hedged risk.
(3) Due from related body corporate entities and due to related body corporate entities includes derivatives and trading positions classified as HFT. All other intercompany receivables or payables are carried at amortised cost except for non-financial instruments.
(4) The fair value of other liabilities carried at amortised cost excludes lease liabilities.

Note 34
Measurement categories of financial instruments continued

The following table contains information relating to the measurement categories of assets and liabilities of the Company. The descriptions of measurement categories are included in Note 41(vii) *Financial instruments*.

The methods and significant assumptions that have been applied in determining the fair values of assets and liabilities are disclosed in Note 35 *Fair value of assets and liabilities*.

	FINANCIAL INSTRUMENTS CARRIED AT							FAIR VALUE OF ITEMS CARRIED AT	
	FAIR VALUE								
	HFT $m	DFVTPL $m	FVTPL $m	FVOCI $m	Amortised cost $m	Non-financial instruments $m	Statements of financial position total $m	Fair value $m	Amortised cost $m
									COMPANY 2023
Assets									
Cash and bank balances	–	–	–	–	36,176	–	36,176	–	36,176
Cash collateralised lending and reverse repurchase agreements	–	–	4,963	22,195	15,686	–	42,844	27,158	15,686
Trading assets[1]	13,675	–	–	–	–	782	14,457	14,457	–
Margin money and settlement assets	–	–	50	–	14,468	–	14,518	50	14,468
Derivative assets	26,267	–	908	–	–	–	27,175	27,175	–
Financial investments:									
Equity	–	–	209	–	–	–	209	209	–
Debt	–	–	45	13,339	1,126	–	14,510	13,384	1,126
Held for sale and other assets	–	–	1,499	–	2,245	408	4,152	1,499	2,245
Loan assets[2],[3]	–	–	194	2,063	137,828	–	140,085	2,257	137,272
Due from related body corporate entities[4]	3,379	–	–	–	340	168	3,887	3,379	340
Due from subsidiaries[4]	8,263	–	145	93	9,802	11	18,314	8,501	9,802
Property, plant and equipment and right-of-use assets[2]	–	–	–	–	–	3,428	3,428	–	–
Investments in subsidiaries	–	–	–	–	–	4,774	4,774	–	–
Deferred tax assets	–	–	–	–	–	672	672	–	–
Total assets	**51,584**	**–**	**8,013**	**37,690**	**217,671**	**10,243**	**325,201**	**98,069**	**217,115**
Liabilities									
Cash collateralised borrowing and repurchase agreements	–	171	–	–	17,757	–	17,928	171	17,757
Trading liabilities	4,757	–	–	–	–	–	4,757	4,757	–
Margin money and settlement liabilities	–	–	–	–	17,364	–	17,364	–	17,364
Derivative liabilities	26,353	–	1,068	–	–	–	27,421	27,421	–
Deposits	–	–	–	–	133,661	–	133,661	–	133,545
Other liabilities	–	636	–	–	1,126	2,201	3,963	636	1,125
Borrowings	–	–	–	–	2,429	–	2,429	–	2,431
Due to related body corporate entities[4]	461	–	–	–	11,852	61	12,374	461	11,852
Due to subsidiaries[4]	5,331	–	39	–	23,341	5	28,716	5,368	23,341
Issued debt securities[2]	–	1,351	–	–	45,230	–	46,581	1,351	45,165
Deferred tax liabilities	–	–	–	–	–	25	25	–	–
Loan capital[2]	–	–	–	–	9,523	–	9,523	–	9,355
Total liabilities	**36,902**	**2,158**	**1,107**	**–**	**262,283**	**2,292**	**304,742**	**40,165**	**261,935**

(1) Non-financial assets under 'Trading assets' primarily represent commodities carried at fair value less costs to sell.
(2) Items measured at amortised cost or cost includes, where applicable, fair value hedge accounting adjustments for designated hedged risk.
(3) Loan assets measured at FVOCI represents certain loan portfolio assessed to be managed under a held to collect and sell business model in the Company. In the Consolidated Entity, the portfolio is managed under a held to collect business model and hence measured at amortised cost.
(4) Due from related body corporate entities and subsidiaries and due to related body corporate entities and subsidiaries includes derivatives and trading positions classified as HFT. All other intercompany receivables or payables are carried at amortised cost except for non-financial instruments.

Note 34
Measurement categories of financial instruments continued

	FINANCIAL INSTRUMENTS CARRIED AT							FAIR VALUE OF ITEMS CARRIED AT	
	FAIR VALUE								
	HFT $m	DFVTPL $m	FVTPL $m	FVOCI $m	Amortised cost $m	Non-financial instruments $m	Statements of financial position total $m	Fair value $m	Amortised cost $m
									COMPANY 2022
Assets									
Cash and bank balances	–	–	–	–	43,594	–	43,594	–	43,594
Cash collateralised lending and reverse repurchase agreements	–	–	4,170	23,588	10,447	–	38,205	27,758	10,447
Trading assets[1]	8,255	–	–	–	–	1,876	10,131	10,131	–
Margin money and settlement assets	–	–	5	–	13,810	–	13,815	5	13,810
Derivative assets	74,028	–	416	–	–	–	74,444	74,444	–
Financial investments:									
Equity	–	–	221	–	–	–	221	221	–
Debt	–	–	14	6,238	4	–	6,256	6,252	4
Held for sale and other assets	–	–	850	–	1,709	382	2,941	850	1,709
Loan assets[2],[3]	–	78	135	3,266	117,700	–	121,179	3,479	117,658
Due from other related body corporate entities[4]	1,735	–	–	–	1,122	97	2,954	1,735	1,122
Due from subsidiaries[4]	11,973	–	232	140	11,606	5	23,956	12,345	11,606
Property, plant and equipment and right-of-use assets[2]	–	–	–	–	–	2,801	2,801	–	–
Investments in subsidiaries	–	–	–	–	–	6,287	6,287	–	–
Deferred tax assets	–	–	–	–	–	402	402	–	–
Total assets	95,991	78	6,043	33,232	199,992	11,850	347,186	137,220	199,950
Liabilities									
Cash collateralised borrowing and repurchase agreements	–	241	–	–	16,706	–	16,947	241	16,706
Trading liabilities	5,210	–	–	–	–	–	5,210	5,210	–
Margin money and settlement liabilities	–	–	–	–	15,593	–	15,593	–	15,593
Derivative liabilities	70,988	–	533	–	–	–	71,521	71,521	–
Deposits	–	–	–	–	101,417	–	101,417	–	101,433
Other liabilities	–	711	–	–	500	1,811	3,022	711	500
Borrowings	–	–	–	–	2,787	–	2,787	–	2,792
Due to other related body corporate entities[5]	512	–	–	–	9,691	–	10,203	512	9,691
Due to subsidiaries[5]	13,870	–	40	–	22,656	6	36,572	13,910	22,656
Issued debt securities[2]	–	1,585	–	–	57,137	–	58,722	1,585	57,160
Deferred tax liabilities	–	–	–	–	–	29	29	–	–
Loan capital[2]	–	–	–	–	6,896	–	6,896	–	7,027
Total liabilities	90,580	2,537	573	–	233,383	1,846	328,919	93,690	233,558

(1) Non-financial assets under 'Trading assets' primarily represent commodities carried at fair value less costs to sell.
(2) Items measured at amortised cost or cost includes, where applicable, fair value hedge accounting adjustments for the designated hedged risk.
(3) Loan assets measured at FVOCI represents certain loan portfolio assessed to be managed under a held to collect and sell business model in the Company. In the Consolidated Entity, the portfolio is managed under a held to collect business model and hence measured at amortised cost.
(4) Due from related body corporate entities includes derivatives and trading positions classified as HFT and all other financial receivables from related body corporate entities are carried at amortised cost.
(5) Due to related body corporate entities and subsidiaries includes derivatives and trading positions classified as HFT. All other financial payables to related body corporate entities are carried at amortised cost.

Note 35
Fair value of assets and liabilities

Fair value reflects the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Quoted prices or rates are used to determine fair value where an active market exists. If the market for a financial and non-financial instrument is not active, fair values are estimated using present value or other valuation techniques, using inputs based on market conditions prevailing at the measurement date.

The values derived from applying these techniques are affected by the choice of valuation model used and the underlying assumptions made regarding such inputs.

Items measured at fair value are categorised in their entirety, in accordance with the levels of the fair value hierarchy as outlined below.

Level 1	unadjusted quoted prices in active markets for identical assets or liabilities
Level 2	inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
Level 3	inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The appropriate fair value hierarchy level for an item is determined on the basis of the lowest level input that is significant to the fair value measurement.

AASB 13 *Fair Value Measurement* requires the use of the price within the bid-offer spread that is most representative of fair value. Valuation systems will typically generate mid-market prices. The bid-offer adjustment reflects the extent to which bid-offer costs would be incurred if substantially all of the residual net exposure to market risks were closed on a portfolio basis.

The following methods and significant assumptions have been applied in determining the fair values of the following items carried at amortised cost in the Statements of financial position.

Asset or liability	Valuation techniques, inputs and other significant assumptions
Cash and bank balances, Cash collateralised lending and reverse repurchase agreement, Cash collateralised borrowing and repurchase agreement	The fair values of cash and bank balance, cash collateralised lending and reverse repurchase agreement, cash collateral borrowing and repurchase agreement approximates their carrying amounts as these are highly liquid and short-term in nature.
Loan assets and Deposits	The fair values of fixed rate loan assets and term deposits is determined with reference to changes in interest rates and credit spreads. The fair values of variable rate loan assets and deposits approximates their carrying amounts, subject to any adjustment for changes in the credits spreads. The fair values of demand deposits with no fixed maturity approximates their carrying amount as they are short-term in nature or are payable on demand.
Financial investments	The fair values of liquid assets and other instruments maturing within three months are approximate to their carrying amounts. The fair values of fixed rate debt investments carried at amortised cost is estimated by reference to current market rates offered on similar securities and the creditworthiness of the borrower. The fair values of variable rate investments approximate their carrying amounts.
Issued debt securities, Borrowings and Loan capital	The fair values of issued debt securities, borrowings and loan capital is based on quoted prices in active markets where available. Where quoted prices are not available the fair value is based on discounted cash flows using rates appropriate to the term and incorporates changes in the Consolidated Entity's own credit spread.
Margin money, settlement assets and settlement liabilities **Other financial assets and financial liabilities**	The fair values of margin money, settlement assets, settlement liabilities, other financial assets and financial liabilities approximate their carrying amounts.

Note 35
Fair value of assets and liabilities continued

The following methods and significant assumptions have been applied in determining the fair values of following items carried at fair value in the Statements of financial position.

Asset or liability	Valuation techniques, inputs and other significant assumptions
Trading assets, Trading liabilities and Derivatives	Trading assets, including commodities and commodity contracts, trading liabilities, derivative financial instruments and other transactions undertaken for trading purposes are measured at fair value by reference to quoted prices in active markets where available (for example, listed securities). If quoted prices in active markets are not available, then fair values are estimated on the basis of other recognised valuation techniques. The Consolidated Entity has incorporated the market implied funding costs for uncollateralised derivative positions as a Funding Valuation Adjustment (FVA). FVA is determined by calculating the net expected exposures at a counterparty level and applying the Consolidated Entity's internal Treasury lending rates as an input into the calculation. The approach takes into account the PD of each counterparty, as well as any mandatory break clauses.
Repurchase and reverse repurchase agreements	Repurchase and reverse repurchase agreements, being collateralised financing arrangements, are measured at fair value with reference to the securities which are held or provided as the collateral for the financing agreement.
Financial investments	Financial investments classified as FVTPL or FVOCI are measured at fair value by reference to quoted prices in active markets where available (for example, listed securities). If quoted prices in active markets are not available, the fair values are estimated on the basis of other recognised valuation techniques that maximise the use of quoted prices and observable market inputs.
Loan assets and Issued debt securities	Fair values of loans and issued debt securities are measured by reference to quoted prices in active markets where available. If quoted prices are not available in active markets, the fair values are estimated with reference to current market rates.
Other financial assets and financial liabilities	Fair values of other financial assets and financial liabilities are based upon data or valuation techniques, appropriate to the nature and type of the underlying instruments.

For financial assets carried at fair value, in order to measure counterparty credit risk, an adjustment is incorporated into the valuation. Where exposures are managed on a portfolio basis, the adjustment is calculated on a counterparty basis for those exposures. For financial liabilities carried at fair value, in order to measure the Consolidated Entity's own credit risk, an adjustment is incorporated into the valuations.

Where valuation techniques are used to determine fair values, they are validated and periodically reviewed by qualified personnel independent of the area that created them. The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. All models are reviewed before they are used. Models are calibrated periodically to test the outputs and reflect the prices from observable current market transactions in same instrument or other available observable market data.

To the extent possible, models use only observable market data (for example OTC derivatives), however management is required to make assumptions for certain inputs that are not supported by prices from observable current market transactions in the same instrument such as volatility and correlation.

Note 35
Fair value of assets and liabilities continued

Assets and liabilities measured at amortised cost

The fair values calculated for financial instruments which are carried in the Statements of financial position at amortised cost are for disclosure purposes only. The methods and assumptions applied to derive these fair values can require significant judgement by management and therefore may not necessarily be comparable to other financial institutions.

The following table summarises the levels of the fair value hierarchy of financial assets and financial liabilities measured at amortised cost except where the carrying value is approximately equal to the fair value.

	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
				CONSOLIDATED 2023
Assets				
Loan assets	**–**	**5,844**	**135,028**	**140,872**
Total assets	**–**	**5,844**	**135,028**	**140,872**
Liabilities				
Deposits	**94,516**	**40,016**	**–**	**134,532**
Borrowings	**476**	**7,060**	**323**	**7,859**
Issued debt securities	**–**	**45,381**	**11,134**	**56,515**
Loan capital	**1,328**	**8,027**	**–**	**9,355**
Total liabilities	**96,321**	**100,484**	**11,457**	**208,261**
				CONSOLIDATED 2022
Assets				
Loan assets	–	5,492	117,488	122,980
Total assets	–	5,492	117,488	122,980
Liabilities				
Deposits	80,717	20,913	–	101,630
Borrowings	446	5,175	103	5,724
Issued debt securities	–	57,931	12,563	70,494
Loan capital	1,351	5,676	–	7,027
Total liabilities	82,514	89,695	12,666	184,875

Note 35
Fair value of assets and liabilities continued

Assets and liabilities measured at amortised cost continued

The following table summarises the levels of the fair value hierarchy of financial assets and financial liabilities measured at amortised cost except where the carrying value is approximately equal to the fair value.

	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
				COMPANY 2023
Assets				
Loan assets	**-**	**5,294**	**131,978**	**137,272**
Total assets	**-**	**5,294**	**131,978**	**137,272**
Liabilities				
Deposits	**94,425**	**39,120**	**-**	**133,545**
Borrowings	**476**	**1,955**	**-**	**2,431**
Issued debt securities	**-**	**45,165**	**-**	**45,165**
Loan capital	**1,328**	**8,027**	**-**	**9,355**
Total liabilities	**96,229**	**94,267**	**-**	**190,496**
				COMPANY 2022
Assets				
Loan assets	-	5,198	112,460	117,658
Total assets	-	5,198	112,460	117,658
Liabilities				
Deposits	80,639	20,794	-	101,433
Borrowings	446	2,346	-	2,792
Issued debt securities	-	57,160	-	57,160
Loan capital	1,351	5,676	-	7,027
Total liabilities	82,436	85,976	-	168,412

Note 35
Fair value of assets and liabilities continued

Assets and liabilities measured at fair value

The following table summarises the levels of the fair value hierarchy for assets and liabilities that are recognised and measured at fair value in the financial statements.

	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
				CONSOLIDATED 2023
Assets				
Cash collateralised lending and reverse repurchase agreements	**–**	**27,304**	**–**	**27,304**
Trading assets	**8,207**	**6,827**	**758**	**15,792**
Margin money and settlement assets	**–**	**576**	**–**	**576**
Derivative assets	**12**	**35,056**	**752**	**35,820**
Financial investments	**3,770**	**11,135**	**273**	**15,178**
Held for sale and other assets	**–**	**2,311**	**48**	**2,359**
Loan assets	**–**	**282**	**3**	**285**
Due from related body corporate entities	**–**	**3,379**	**–**	**3,379**
Total assets	**11,989**	**86,870**	**1,834**	**100,693**
Liabilities				
Cash collateralised borrowing and repurchase agreements	**–**	**277**	**–**	**277**
Trading liabilities	**4,641**	**113**	**–**	**4,754**
Derivative liabilities	**8**	**31,767**	**747**	**32,522**
Other liabilities	**–**	**1,118**	**–**	**1,118**
Borrowings	**–**	**260**	**–**	**260**
Due to related body corporate entities	**–**	**462**	**–**	**462**
Issued debt securities	**–**	**1,351**	**–**	**1,351**
Total liabilities	**4,649**	**35,348**	**747**	**40,744**
				CONSOLIDATED 2022
Assets				
Cash collateralised lending and reverse repurchase agreements	–	31,393	–	31,393
Trading assets	4,309	6,889	521	11,719
Margin money and settlement assets	–	524	–	524
Derivative assets	1	84,064	551	84,616
Financial investments	1,412	4,180	915	6,507
Held for sale and other assets	–	1,616	60	1,676
Loan assets	–	259	3	262
Due from related body corporate entities	–	1,741	–	1,741
Total assets	5,722	130,666	2,050	138,438
Liabilities				
Cash collateralised borrowing and repurchase agreements	–	241	–	241
Trading liabilities	5,034	172	–	5,206
Derivative liabilities	10	82,877	1,304	84,191
Other liabilities	–	1,128	–	1,128
Due to related body corporate entities	–	513	–	513
Issued debt securities	–	1,585	–	1,585
Total liabilities	5,044	86,516	1,304	92,864

Note 35
Fair value of assets and liabilities continued

Assets and liabilities measured at fair value continued

The following table summarises the levels of the fair value hierarchy for assets and liabilities that are recognised and measured at fair value in the financial statements.

	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
				COMPANY 2023
Assets				
Cash collateralised lending and reverse repurchase agreements	**–**	**27,158**	**–**	**27,158**
Trading assets	**8,203**	**5,964**	**290**	**14,457**
Margin money and settlement assets	**–**	**50**	**–**	**50**
Derivative assets	**12**	**26,881**	**282**	**27,175**
Financial investments	**2,237**	**11,135**	**221**	**13,593**
Held for sale and other assets	**–**	**1,499**	**–**	**1,499**
Loan assets	**–**	**192**	**2,065**	**2,257**
Due from subsidiaries	**–**	**8,324**	**177**	**8,501**
Due from related body corporate entities	**–**	**3,379**	**–**	**3,379**
Total assets	**10,452**	**84,582**	**3,035**	**98,069**
Liabilities				
Cash collateralised borrowing and repurchase agreements	**–**	**171**	**–**	**171**
Trading liabilities	**4,645**	**112**	**–**	**4,757**
Derivative liabilities	**8**	**27,254**	**159**	**27,421**
Other liabilities	**–**	**636**	**–**	**636**
Due to subsidiaries	**–**	**5,264**	**104**	**5,368**
Due to related body corporate entities	**–**	**461**	**–**	**461**
Issued debt securities	**–**	**1,351**	**–**	**1,351**
Total liabilities	**4,653**	**35,249**	**263**	**40,165**
				COMPANY 2022
Assets				
Cash collateralised lending and reverse repurchase agreements	–	27,758	–	27,758
Trading assets	4,303	5,672	156	10,131
Margin money and settlement assets	–	5	–	5
Derivative assets	1	74,189	254	74,444
Financial investments	1,409	4,179	885	6,473
Held for sale and other assets	–	848	2	850
Loan assets	–	210	3,269	3,479
Due from subsidiaries	–	11,738	607	12,345
Due from related body corporate entities	–	1,735	–	1,735
Total assets	5,713	126,334	5,173	137,220
Liabilities				
Cash collateralised borrowing and repurchase agreements	–	241	–	241
Trading liabilities	5,037	173	–	5,210
Derivative liabilities	11	71,080	430	71,521
Other liabilities	–	711	–	711
Due to subsidiaries	–	13,453	457	13,910
Due to related body corporate entities	–	512	–	512
Issued debt securities	–	1,585	–	1,585
Total liabilities	5,048	87,755	887	93,690

Note 35
Fair value of assets and liabilities continued

Reconciliation of balances in Level 3 of the fair value hierarchy

The following table summarises the movements in Level 3 of the fair value hierarchy for the assets and liabilities, measured at fair value.

	Trading assets $m	Financial investments $m	Held for sale and other assets $m	Loan assets $m	Derivative financial instruments (net fair value)(1) $m	Total $m
						CONSOLIDATED 2022
Balance as at 1 Apr 2021	420	652	25	55	(17)	1,135
Purchases, originations, issuances and other additions	103	172	60	3	23	361
Sales, settlements and repayments	(43)	(43)	(21)	(55)	27	(135)
Transfers into Level 3(2)	55	349	–	–	(31)	373
Transfers out of Level 3(2)	(223)	(218)	(3)	–	(14)	(458)
Fair value movements recognised in the income statement:						
Net trading income/(loss)(3)	209	(8)	–	–	(741)	(540)
Other income/(loss)	–	8	(1)	–	–	7
Fair value movements recognised in OCI(3)	–	3	–	–	–	3
Balance as at 31 Mar 2022	521	915	60	3	(753)	746
Fair value movements for the financial year included in the income statements for assets and liabilities held at the end of the financial year(3)	225	(5)	(1)	–	(698)	(479)
						CONSOLIDATED 2023
Balance as at 1 Apr 2022	**521**	**915**	**60**	**3**	**(753)**	**746**
Purchases, originations, issuances and other additions	**249**	**149**	**12**	**8**	**305**	**723**
Sales, settlements and repayments	**(23)**	**(23)**	**(62)**	**(9)**	**232**	**115**
Transfers into Level 3(2)	**212**	**50**	**39**	**-**	**162**	**463**
Transfer out of Level 3(2)	**(178)**	**(836)**	**(5)**	**-**	**84**	**(935)**
Fair value movements recognised in the income statement:						
Net trading (loss)/income(3)	**(23)**	**51**	**1**	**1**	**(25)**	**5**
Other income	**-**	**28**	**3**	**-**	**-**	**31**
Fair value movements recognised in OCI(3)	**-**	**(61)**	**-**	**-**	**-**	**(61)**
Balance as at 31 Mar 2023	**758**	**273**	**48**	**3**	**5**	**1,087**
Fair value movements for the financial year included in the income statements for assets and liabilities held at the end of the financial year(3)	**(17)**	**70**	**-**	**-**	**(29)**	**24**

(1) The derivative financial instruments in the table above are presented on a net basis. On a gross basis, derivative assets are $752 million (2022: $551 million) and derivative liabilities are $747 million (2022: $1,304 million).
(2) Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities were transferred at the beginning of the financial year.
(3) The Consolidated Entity employs various hedging techniques in order to manage market risks including foreign exchange risks in Level 3 positions. The gains and losses relating to such hedging techniques that may include the purchase or sale of financial instruments measured at fair value that are classified as Level 1 or 2 positions or foreign currency denominated financial instruments that are measured at amortised cost, are not presented in the table above.

Notes to the financial statements

For the financial year ended 31 March 2023 continued

Note 35
Fair value of assets and liabilities continued

Reconciliation of balances in Level 3 of the fair value hierarchy continued

The following table summarises the movements in Level 3 of the fair value hierarchy for the assets and liabilities, measured at fair value.

	Trading assets $m	Financial investments $m	Loan assets $m	Due from/to subsidiaries (net values)[1] $m	Held for sale and other assets $m	Derivative financial instruments (net replacement values)[2] $m	Total $m
							COMPANY 2022
Balance as at 1 Apr 2021	173	593	2,755	223	19	9	3,772
Purchases, originations, issuances and other additions	51	167	1,936	573	2	(18)	2,711
Sales, settlements and repayments	(37)	(10)	(1,372)	(643)	(15)	13	(2,064)
Transfers into Level 3[3]	37	349	–	(12)	–	(49)	325
Transfer out of Level 3[3]	(78)	(218)	–	4	–	(12)	(304)
Fair value movements recognised in income statement:							
Net trading income/(loss)[4]	10	(8)	–	–	–	(119)	(117)
Other income/(loss)	–	9	–	5	(4)	–	10
Fair value movements recognised in OCI[4]	–	3	(50)	–	–	–	(47)
Balance as at 31 Mar 2022	156	885	3,269	150	2	(176)	4,286
Fair value movements for the financial year included in the income statements for assets and liabilities held at the end of the financial year[4]	28	(7)	–	5	–	(121)	(95)
							COMPANY 2023
Balance as at 1 Apr 2022	**156**	**885**	**3,269**	**150**	**2**	**(176)**	**4,286**
Purchases, originations, issuances and other additions	**122**	**149**	**–**	**–**	**–**	**32**	**303**
Sales, settlements and repayments	**(18)**	**(23)**	**(1,155)**	**(64)**	**–**	**104**	**(1,156)**
Transfers into Level 3[3]	**138**	**50**	**–**	**–**	**–**	**73**	**261**
Transfer out of Level 3[3]	**(90)**	**(836)**	**–**	**–**	**(2)**	**19**	**(909)**
Fair value movements recognised in income statement:							
Net trading (loss)/income[4]	**(18)**	**46**	**–**	**–**	**–**	**71**	**99**
Other income/(loss)	**–**	**11**	**–**	**(13)**	**–**	**–**	**(2)**
Fair value movements recognised in OCI[4]	**–**	**(61)**	**(49)**	**–**	**–**	**–**	**(110)**
Balance as at 31 Mar 2023	**290**	**221**	**2,065**	**73**	**–**	**123**	**2,772**
Fair value movements for the financial year included in the income statements for assets and liabilities held at the end of the financial year[4]	**(14)**	**29**	**–**	**(13)**	**–**	**71**	**73**

(1) The balance due from/to subsidiaries in the table above is presented on a net basis. On a gross basis, due from subsidiaries are $177 million (2022: $607 million) and due to subsidiaries are $104 million (2022: $430 million).
(2) The derivative financial instruments in the table above are presented on a net basis. On a gross basis, derivative assets are $282 million (2022: $254 million) and derivative liabilities are $159 million (2022: $430 million).
(3) Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the financial year.
(4) The Company employs various hedging techniques in order to manage market risks including foreign exchange risks in Level 3 positions. The gains and losses relating to such hedging techniques, that may include the purchase or sale of financial instruments measured at fair value that are classified as Level 1 or 2 positions or foreign currency denominated financial instruments that are measured at amortised cost, are not presented in the table above.

Note 35
Fair value of assets and liabilities continued

Significant transfers between levels of the fair value hierarchy

During the financial year the Consolidated Entity and the Company did not have significant transfers between Level 1 and Level 2.

Transfers into Level 3 were due to the lack of observable valuation inputs for certain investments and trading balances. Transfers out of Level 3 were principally due to valuation inputs becoming observable during the financial year. Financial assets reclassified into/out of the fair value hierarchy disclosure due to recognition and measurement category changes, or where there have been changes in significant influence or control but some form of interest in the assets are still retained, are also presented as transfers into/out of Level 3.

Unrecognised gains or losses

The best evidence of fair value at initial recognition is its transaction price, unless its fair value is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique for which variables include only data from observable markets. Where such alternative evidence exists, the Consolidated Entity recognises profit or loss immediately when the asset or liability is recognised ('day 1 profit or loss'). When significant unobservable inputs are used to determine fair value, the day 1 profit or loss is deferred and is recognised in the income statement over the life of the transaction or when the inputs become observable.

The table below summarises the deferral and recognition of profit or loss where a valuation technique has been applied in which significant unobservable inputs are used.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
Balance at the beginning of the financial year	**53**	75	**42**	65
Deferred gains on new transactions and other adjustments	**228**	40	**105**	27
Foreign exchange movements	**21**	1	**5**	1
Recognised in net trading income during the year[1]	**(55)**	(63)	**(29)**	(51)
Balance at the end of the financial year	**247**	53	**123**	42

(1) Includes amortisation, subsequent realisation due to unobservable inputs becoming observable, maturity and termination.

Note 35
Fair value of assets and liabilities continued

Significant unobservable inputs

The following table contains information about the significant unobservable inputs used in Level 3 valuations, and the valuation techniques used to measure fair value. The range of values represent the highest and lowest input used in the valuation techniques. The range does not therefore reflect the level of uncertainty regarding a particular input, but rather the different underlying characteristics of the relevant assets and liabilities.

	Fair value of assets $m	Fair value of liabilities $m	Valuation technique(s)	Significant unobservable inputs	RANGE OF INPUTS Minimum value	RANGE OF INPUTS Maximum value
					CONSOLIDATED 2023	
Commodities	**1,482**	**747**	Pricing model	Commodity margin curves	**(97.3)**	**626.9**
			Pricing model	Correlation	**(72.0%)**	**100.0%**
			Pricing model	Volatility and related variables	**1.3%**	**153.5%**
Equity and equity-linked products	**199**	**-**	Market comparability	Price in %(1)		
Interest rate and other products	**153**	**-**	Discounted cash flows	Discount rate - Credit spreads	**0.0%**	**10.0%**
Total	**1,834**	**747**				
					CONSOLIDATED 2022	
Commodities	1,073	1,304	Pricing model	Commodity margin curves	(270.0)	1,665.0
			Pricing model	Correlation	(40.0%)	100.1%
			Pricing model	Volatility and related variables	(12.6%)	90.9%
Equity and equity-linked products	101	-	Market comparability	Price in %(1)		
Interest rate and other products	876	-	Discounted cash flows	Discount rate - Credit spreads	1.0%	10.0%
			Pricing model	Yield	2.7%	3.5%
			Comparable transactions	Price in %	0.0%	100.0%
Total	2,050	1,304				

The following information contains details around the significant unobservable inputs which are utilised to fair value the level 3 assets and liabilities.

Commodities

Commodity margin curves: Certain commodities are valued using related observable products from the market and a margin is applied to the observable market inputs to mitigate the impact of differences in the products. Judgement is involved in the calculation of these margin curves depending on the quality of commodity or delivery location and other economic conditions.

Correlation: Correlation is a measure of the relationship between the movements of input variables (i.e. how the change in one variable influences a change in the other variable). It is expressed as a percentage between -100% and +100%, where 100% represents perfectly correlated variables add 100% represents inversely correlated. Correlation is a key input into the valuation of derivatives with more than one underlying (e.g., interest rates, credit spreads, foreign exchanges rates, inflation rates or equity prices) and is generally used to value hybrid and exotic instruments.

Volatility: Volatility is a measure of the variability or uncertainty in returns for a given underlying input and is generally expressed as a percentage, which represents an estimate of the amount a particular underlying instrument, parameter or index will change in value over time. Volatility is an input in the valuation of derivatives containing optionality. Volatility is impacted by the underlying risk, term and strike price of a derivative.

Correlations and volatilities are derived through the extrapolation of observable volatilities, recent transaction prices, quotes from other market participants and historical data adjusted for current conditions.

(1) The range of inputs related to market comparability has not been disclosed as the diverse nature of the underlying investments results in a wide range of inputs.

Note 35
Fair value of assets and liabilities continued

Equity and equity-linked products

Unlisted equity securities are generally valued based on earnings or revenue multiples, referencing market transactions which are not directly comparable or quantifiable and are adjusted as appropriate for current economic conditions. Other significant unobservable inputs may include NAV and discount rates determined using inputs specific to the underlying investment and forecast cash flows and earnings/revenues of investee entities.

Interest rate and other products

Discount rate - **Credit spreads**: Loans are generally valued using discount rates. Significant unobservable inputs may include interest rates and credit spreads of counterparties and original issue discounts on primary debt issuances. Credit spread is the premium over a benchmark interest rate required by the market to accept lower credit quality which increase the discount factor applied to future cashflows thereby reducing the value of asset. Credit spreads may be implied from the market prices and may not be observable in more illiquid markets

Yield: Yield represents expected rate of annual return on an instrument. In certain circumstances, yield of a specific security is not observable in the market, it is estimated using the historical data or by adjusting the yield of similar securities to capture the characteristics of the security being valued

Price in %: Comparable transactions are leveraged to price the fair value of the assets and liabilities and a percentage is applied to ascertain the proportion of the transaction price that is comparable with the specific asset/liability. This price percentage is unobservable input and judgemental depending on the characteristics of the asset/liability.

Sensitivity analysis of valuations using unobservable inputs

The table below shows the sensitivity to reasonably possible alternative assumptions for Level 3 assets and liabilities whose fair values are determined in whole or in part using unobservable inputs. The impact of sensitivity of instruments which hedge the Level 3 positions but are classified as Level 1 or 2 is not included in the table below.

	FAVOURABLE CHANGES		UNFAVOURABLE CHANGES	
	Profit or loss $m	OCI $m	Profit or loss $m	OCI $m
				CONSOLIDATED 2023
Product type				
Commodities	**116**	**-**	**(103)**	**-**
Equity and equity-linked products	**15**	**-**	**(15)**	**-**
Interest rate and other products	**2**	**-**	**(2)**	**-**
Total	**133**	**-**	**(120)**	**-**
				CONSOLIDATED 2022
Product type				
Commodities	134	-	(137)	-
Equity and equity-linked products	8	-	(24)	-
Interest rate and other products	12	-	(12)	-
Total	154	-	(173)	-

The favourable and unfavourable changes from using reasonable possible alternative assumptions for the valuation of above product types have been calculated by recalibrating the valuation model using stressed significant unobservable inputs of the Consolidated Entity's range of reasonably possible estimates.

Note 35
Fair value of assets and liabilities continued

	FAVOURABLE CHANGES		UNFAVOURABLE CHANGES	
	Profit or loss $m	OCI $m	Profit or loss $m	OCI $m
				COMPANY 2023
Product type				
Commodities	**46**	**–**	**(40)**	**–**
Equity and equity-linked products	**12**	**–**	**(12)**	**–**
Interest rate and other products	**2**	**–**	**(2)**	**–**
Total	**60**	**–**	**(54)**	**–**
				COMPANY 2022
Product type				
Commodities	55	–	(50)	–
Equity and equity-linked products	6	–	(22)	–
Interest rate and other products	7	–	(8)	–
Total	68	–	(80)	–

The favourable and unfavourable changes of using reasonable possible alternative assumptions for the valuation of above product types have been calculated by recalibrating the valuation model using stressed significant unobservable inputs of the Company's range of possible estimates.

Note 36
Offsetting of financial assets and financial liabilities

The Consolidated Entity and the Company present financial assets and financial liabilities on a net basis in the Statements of financial position when they meet the criteria described in the offsetting of financial instruments section of Note 41(vii) *Financial instruments*. The following tables provide information on the impact of offsetting of financial instruments in the Statements of financial position, as well as amounts subject to enforceable netting arrangements that do not meet all the criteria for offsetting and therefore are presented gross in the Statements of financial position. Enforceable netting arrangements may allow for net settlement of specified contracts with a counterparty only in the event of default or other pre-determined events, such that their potential effects on the Consolidated Entity's and the Company's financial position in that circumstance is to settle these contracts as one arrangement.

The Consolidated Entity and the Company use a variety of credit risk mitigation strategies in addition to netting and collateral arrangements, therefore amounts presented in this note are not intended to represent the credit risk exposure of the entity. Refer to Note 33.1 *Credit risk* for information on credit risk management.

	EFFECT OF OFFSETTING ON THE STATEMENTS OF FINANCIAL POSITION			RELATED AMOUNTS SUBJECT TO ENFORCEABLE NETTING ARRANGEMENTS[1]			
	Gross amount[2],[3] $m	Amounts offset on the Statements of financial position $m	Net amounts reported on the Statements of financial position $m	Other recognised financial instruments $m	Cash and other financial collateral $m	Other collateral for exposures not subject to enforceable netting arrangements[1] $m	Net exposure $m
							CONSOLIDATED 2023
Cash collateralised lending and reverse repurchase agreements	43,510	(309)	43,201	(166)	(37,165)	(5,823)	47
Settlement assets[4]	10,530	(5,124)	5,406	(1,263)	-	-	4,143
Derivative assets	45,004	(9,184)	35,820	(19,730)	(6,379)	(93)	9,618
Due from related body corporate entities[5]	4,171	(383)	3,788	(443)	(2,942)	-	403
Total assets	**103,215**	**(15,000)**	**88,215**	**(21,602)**	**(46,486)**	**(5,916)**	**14,211**
Cash collateralised borrowings and repurchase agreements	(19,046)	309	(18,737)	166	14,707	250	(3,614)
Settlement liabilities[4]	(9,952)	5,124	(4,828)	1,388	-	-	(3,440)
Derivative liabilities	(41,706)	9,184	(32,522)	19,605	6,322	137	(6,458)
Due to related body corporate entities[5]	(11,743)	383	(11,360)	443	137	-	(10,780)
Total liabilities	**(82,447)**	**15,000**	**(67,447)**	**21,602**	**21,166**	**387**	**(24,292)**

(1) Related amounts not offset have been limited to the net amount presented in the Statements of financial position so as not to include the effect of over-collateralisation.
(2) Gross amounts for assets include $5,830 million of cash collateral lending and reverse repurchase agreements, $933 million of settlements assets, $1,792 million of derivative assets and $300 million of due from related body corporate entities not subject to enforceable netting agreements. Gross liabilities includes $250 million of cash collateralised borrowing and repurchase agreements, $869 million of settlements liabilities and $1,442 million of derivative liabilities and $6,535 million of due to related body corporate entities not subject to enforceable netting agreements.
(3) Amounts not subject to enforceable netting arrangements are where either there are no master netting agreements or enforceability of agreement is uncertain under bankruptcy laws in some countries or industries.
(4) Excludes margin money assets of $13,969 million and liabilities of $17,085 million presented under Note 7 *Margin money and settlement assets* and Note 17 *Margin money and settlement liabilities* respectively on the Statements of financial position.
(5) Excludes margin money and non-financial assets of $633 million and liabilities of $3,282 million presented under Due from related body corporate entities and Due to related body corporate entities respectively on the Statements of financial position.

Note 36
Offsetting of financial assets and financial liabilities continued

	EFFECT OF OFFSETTING ON THE STATEMENTS OF FINANCIAL POSITION			RELATED AMOUNTS SUBJECT TO ENFORCEABLE NETTING ARRANGEMENTS[1]			
	Gross amount[2],[3] $m	Amounts offset on the Statements of financial position $m	Net amounts reported on the Statements of financial position $m	Other recognised financial instruments $m	Cash and other financial collateral $m	Other collateral for exposures not subject to enforceable netting arrangements[1] $m	Net exposure $m
							CONSOLIDATED 2022
Cash collateralised lending and reverse repurchase agreements	43,894	(1,346)	42,548	(28)	(37,409)	(4,948)	163
Settlement assets[4]	12,500	(7,178)	5,322	(1,184)	–	–	4,138
Derivative assets	104,346	(19,730)	84,616	(62,513)	(7,747)	–	14,356
Due from related body corporate entities[5]	3,418	(486)	2,932	(490)	(1,306)	–	1,136
Total assets	164,158	(28,740)	135,418	(64,215)	(46,462)	(4,948)	19,793
Cash collateralised borrowings and repurchase agreements	(18,293)	1,346	(16,947)	28	13,754	–	(3,165)
Settlement liabilities[4]	(12,511)	7,178	(5,333)	3,419	–	–	(1,914)
Derivative liabilities	(103,921)	19,730	(84,191)	60,278	8,866	–	(15,047)
Due to related body corporate entities[5]	(10,686)	486	(10,200)	490	61	–	(9,649)
Total liabilities	(145,411)	28,740	(116,671)	64,215	22,681	–	(29,775)

(1) Related amounts not offset have been limited to the net amount presented in the Statements of financial position so as not to include the effect of over-collateralisation.
(2) Gross amounts for assets include $4,948 million of cash collateral lending and reverse repurchase agreements, $816 million of settlements assets, $1,839 million of derivative assets and $1,045 million of due from related body corporate entities not subject to enforceable netting agreements. Gross liabilities includes $nil cash collateralised borrowing and repurchase agreements, $968 million of settlements liabilities and $4,262 million of derivative liabilities and $1,087 million of due to related body corporate entities not subject to enforceable netting agreements.
(3) Amounts not subject to enforceable netting arrangements are where either there are no master netting agreements or enforceability of agreement is uncertain under bankruptcy laws in some countries or industries.
(4) Excludes margin money assets of $14,087 million and liabilities of $16,244 million presented under Note 7 *Margin money and settlement assets* and Note 17 *Margin money and settlement liabilities* respectively on the Statements of financial position.
(5) Excludes margin money and non-financial assets of $493 million and liabilities of $1,437 million presented under Due from related body corporate entities and Due to related body corporate entities respectively on the Statements of financial position.

Note 36
Offsetting of financial assets and financial liabilities continued

	EFFECT OF OFFSETTING ON THE STATEMENTS OF FINANCIAL POSITION			RELATED AMOUNTS SUBJECT TO ENFORCEABLE NETTING ARRANGEMENTS[1]			
	Gross amount[2],[3] $m	Amounts offset on the Statements of financial position $m	Net amounts reported on the Statements of financial position $m	Other recognised financial instruments $m	Cash and other financial collateral $m	Other collateral for exposures not subject to enforceable netting arrangements[1] $m	Net exposure $m
							COMPANY 2023
Cash collateralised lending and reverse repurchase agreements	**43,153**	**(309)**	**42,844**	**(166)**	**(36,874)**	**(5,765)**	**39**
Settlement assets[4]	**8,346**	**(4,365)**	**3,981**	**(1,112)**	**-**	**-**	**2,869**
Derivative assets	**35,627**	**(8,452)**	**27,175**	**(17,292)**	**(4,238)**	**-**	**5,645**
Due from subsidiaries[5]	**18,326**	**(711)**	**17,615**	**(5,159)**	**(6,577)**	**-**	**5,879**
Due from related body corporate entities[6]	**3,985**	**(365)**	**3,620**	**(443)**	**(2,941)**	**-**	**236**
Total assets	**109,437**	**(14,202)**	**95,235**	**(24,172)**	**(50,630)**	**(5,765)**	**14,668**
Cash collateralised borrowings and repurchase agreements	**(18,237)**	**309**	**(17,928)**	**166**	**14,148**	**-**	**(3,614)**
Settlement liabilities[4]	**(8,193)**	**4,365**	**(3,828)**	**1,208**	**-**	**-**	**(2,620)**
Derivative liabilities	**(35,873)**	**8,452**	**(27,421)**	**17,196**	**5,734**	**15**	**(4,476)**
Due to subsidiaries[5]	**(25,916)**	**711**	**(25,205)**	**5,159**	**616**	**-**	**(19,430)**
Due to related body corporate entities[6]	**(9,656)**	**365**	**(9,291)**	**443**	**137**	**-**	**(8,711)**
Total liabilities	**(97,875)**	**14,202**	**(83,673)**	**24,172**	**20,635**	**15**	**(38,851)**
							COMPANY 2022
Cash collateralised lending and reverse repurchase agreements	39,551	(1,346)	38,205	(27)	(33,331)	(4,683)	164
Settlement assets[4]	10,044	(6,139)	3,905	(1,021)	-	-	2,884
Derivative assets	94,106	(19,662)	74,444	(58,032)	(6,811)	-	9,601
Due to subsidiaries[5]	23,382	(2,307)	21,075	(11,854)	(2,658)	-	6,563
Due from related body corporate entities[6]	3,121	(466)	2,655	(490)	(1,226)	-	939
Total assets	170,204	(29,920)	140,284	(71,424)	(44,026)	(4,683)	20,151
Cash collateralised borrowings and repurchase agreements	(18,293)	1,346	(16,947)	27	13,754	1	(3,165)
Settlement liabilities[4]	(10,018)	6,139	(3,879)	3,079	-	-	(800)
Derivative liabilities	(91,183)	19,662	(71,521)	55,974	7,332	-	(8,215)
Due to subsidiaries[5]	(36,708)	2,307	(34,401)	11,854	866	-	(21,681)
Due to related body corporate entities[6]	(9,357)	466	(8,891)	490	61	-	(8,340)
Total liabilities	(165,559)	29,920	(135,639)	71,424	22,013	1	(42,201)

(1) Related amounts not offset have been limited to the net amount presented in the Statements of financial position so as not to include the effect of over-collateralisation.
(2) Gross assets includes balances not subject to offsetting, $5,765 million (2022: $4,684 million) of cash collateral lending and reverse repurchase agreements, $275 million (2022: $408 million) of settlements assets, $457 million (2022: $897 million) of derivative assets, $206 million (2022: $850 million) of due from related body corporate entities and $6,512 million (2022: $5,897 million) of due from subsidiaries. Gross liabilities includes balances not subject to offsetting, $nil (2022: $nil) of cash collateralised borrowing and repurchase agreements, $496 million (2022: $561 million) of settlements liabilities and $619 million (2022: $1,120 million) of derivative liabilities and $5,139 (2022: $5,000 million) of due to related body corporate entities and $16,929 million (2022: $16,333 million) of due to subsidiaries.
(3) Amounts not subject to enforceable netting arrangements are where either there are no master netting agreements or enforceability of agreement is uncertain under bankruptcy laws in some countries or industries.
(4) Excludes margin money assets of $10,537 million (2022: $9,910 million) and liabilities of $13,536 million (2022: $11,651 million) presented under Note 7 *Margin money and settlement assets* and Note 17 *Margin money and settlement liabilities* respectively on the Statements of financial position.
(5) Excludes margin money and non-financial assets of $699 million (2022: $2,881 million) and liabilities of $ 3,511 million (2022: $2,171 million) presented under Due from subsidiaries and Due to subsidiaries respectively on the Statements of financial position.
(6) Excludes margin money and non-financial assets of $267 million (2022: $299 million) and liabilities of $3,083 million (2022: $1,312 million) presented under Due from related body corporate entities and Due to related body corporate entities respectively on the Statements of financial position.

Note 37
Pledged assets and transfers of financial assets

Pledged assets

Items pledged as security for liabilities include the following:

- securities and commodities included under trading assets and off-balance sheet collateral securities pledged for repurchase transactions, stock lending arrangements and trading liabilities. These transactions are governed by standard industry agreements
- loan assets held by the Consolidated SEs provided as collateral against issued debt or repurchase transactions
- other types of financial and non-financial assets disclosed in the following table provided as collateral for borrowings and issued debt securities.

The table below represents items that have been pledged as security for liabilities.

	CONSOLIDATED		COMPANY	
	2023 $m	2022 $m	**2023 $m**	2022 $m
On Balance Sheet items				
Cash and bank balances	**203**	–	**95**	–
Trading assets[1]	**3,516**	2,899	**2,733**	2,890
Financial investments	**947**	1,116	**385**	1,116
Loan assets[2]	**29,679**	28,960	**29,356**	27,935
Margin money and settlement assets	**327**	–	**–**	–
Due from subsidiaries[3]	**–**	–	**2,775**	3,363
Property, plant and equipment	**285**	86	**–**	–
Other assets	**1**	236	**–**	–
Total On Balance Sheet assets pledged for liabilities	**34,958**	33,297	**35,344**	35,304
Off Balance Sheet items				
Securities and commodities[4],[5]	**20,999**	18,607	**21,192**	18,861
Total On and Off Balance Sheet assets pledged for liabilities	**55,957**	51,904	**56,536**	54,165

(1) Includes assets transferred under cash collateralised borrowing and repurchase agreements or in return for the loan of other securities where there is no associated liability on the Consolidated Entity's Statements of financial position. For trading assets pledged by the Consolidated Entity and Company, the transferee has the right to sell or re-pledge the entire value of securities received.
(2) Includes $15,699 million (2022: $15,013 million) held by Consolidated SEs, which are available as security to note holders and debt providers. Additionally, includes $13,972 million (2022: $13,934 million) held by consolidated SEs wherein internally held bonds have been pledged against repurchase agreement liabilities.
(3) Includes cash collateral for guarantees provided to subsidiaries with respect to their exposures from certain counterparties.
(4) Off balance sheet securities and commodities held by the Consolidated Entity include $44,636 million (2022: $43,233 million) of securities and commodities borrowed in return for cash and reverse repurchase arrangements and $7,899 million (2022: $6,199 million) of securities borrowed on an unsecured basis. Of these, the Consolidated Entity re-pledged $20,999 million (2022: $18,607 million) as collateral for repurchase agreement liabilities, as margin for trading purposes or as transfers in return for the loan of other securities, for trading portfolio liabilities and borrowings. Refer to Note 33.1 *Credit risk* for further details.
(5) Off balance sheet securities and commodities held by the Company include $48,421 million (2022: $41,380 million) of securities and commodities borrowed in return for cash and reverse repurchase arrangements from external clients and subsidiaries and $3,957 million (2022: $3,855 million) of securities borrowed on an unsecured basis. Of these, the Company re-pledged $21,192 million (2022: $18,861 million) as collateral for repurchase agreement liabilities, as margin for trading purposes or as transfers in return for the loan of other securities, for trading portfolio liabilities and borrowings. Refer to Note 33.1 *Credit risk* for further details.

Note 37
Pledged assets and transfers of financial assets continued

Transfers of financial assets

The Consolidated Entity may enter into transactions in the normal course of business that transfer risks and rewards of financial assets recognised in the Consolidated Entity Statements of financial position to other entities. Depending on the criteria discussed in Note 41(xii) *Financial instruments,* the Consolidated Entity may be unable to derecognise the transferred asset, be able to derecognise the transferred assets in full or continue to recognise the asset to the extent of its continuing involvement.

Transferred financial assets that are derecognised

When financial assets are derecognised, some continuing involvement may be retained in the assets in the form of liquidity support, financial guarantees, certain derivatives or retention of part of the securitisation interest through interest rate or basis swaps. The Company has interests in certain SEs (into which the Company has previously transferred securitised mortgage assets) through debt notes amounting $12 million in 2022 which is equal to the Company's maximum exposure to loss.

The Consolidated Entity has not retained any material continuing involvement in transferred financial assets.

Transferred financial assets that are not derecognised

The Consolidated Entity did not derecognise any financial assets to the extent of continuing involvement in the years ended 31 March 2023 and 31 March 2022. The following transactions typically result in the transferred assets continuing to be recognised in full.

Repurchase and securities lending agreements

Securities and commodities sold under an agreement to repurchase and securities subject to lending agreements continue to be recognised in the Statements of financial position and an associated liability is recognised for the consideration received.

Where securities are transferred in return for the loan of other securities or on an unsecured basis in return for a fee, the transferred asset continues to be recognised in full. There is no associated liability as the securities received is not recognised on the balance sheet. The Consolidated Entity is unable to use, sell or pledge the transferred assets for the duration of the transaction and remains exposed to interest rate risk and credit risk on these assets.

In certain arrangements, the transferee cannot otherwise sell or pledge the transferred securities, however, the assets may be substituted if the required collateral is maintained.

Financial investment – Total return swap

Financial assets sold, while concurrently entering into a total return swap with the counterparty, continue to be recognised along with an associated liability for the consideration received. The Consolidated Entity does not have legal rights to these assets but has full economic exposure to them. The transferred assets cannot otherwise be pledged or sold by the transferee.

Interests in securitisations

Financial assets (principally home loans and finance lease receivables) are packaged and securities issued to investors. Securitisation vehicles used to achieve this purpose are consolidated when the rights to the residual income of the vehicles, after all payments to investors and costs of the program have been met, is retained. When the Company is entitled to any residual income of a securitisation vehicle, the Company continues to recognise the financial assets. The transferred assets cannot otherwise be pledged or sold.

Other financial transfers not derecognised

Includes loans and leases sold or lent to an external funder but the Consolidated Entity still has full economic exposure to them. In such instances, the Consolidated Entity has a right to receive cash from the lessee and an obligations to pay those cash flows to the external funder.

Note 37
Pledged assets and transfers of financial assets continued

The following tables provide a summary of financial assets that have been transferred in such a way that part or all of the transferred financial assets do not qualify for derecognition, together with the associated liabilities.

	Carrying amount of transferred assets $m	Carrying amount of associated liabilities $m	FOR THOSE LIABILITIES THAT ONLY HAVE RECOURSE TO THE TRANSFERRED ASSETS: Fair value of transferred assets $m	Fair value of associated liabilities $m	Net fair value $m
					CONSOLIDATED 2023
Financial assets not derecognised due to repurchase and securities lending agreements:					
Trading assets[(1)]	**2,122**	**(459)**	**–**	**–**	**–**
Financial investments	**742**	**(740)**	**–**	**–**	**–**
Financial assets not derecognised due to total return/asset swaps:					
Financial investments	**205**	**(189)**	**–**	**–**	**–**
Other financial assets not derecognised:					
Trading assets	**308**	**–**	**–**	**–**	**–**
Loan assets	**7**	**(7)**	**7**	**(7)**	**–**
Total financial assets not derecognised	**3,384**	**(1,395)**	**7**	**(7)**	**–**
					CONSOLIDATED 2022
Financial assets not derecognised due to repurchase and securities lending agreements:					
Trading assets[(1)]	1,198	(245)	–	–	–
Financial investments	884	(852)	–	–	–
Financial assets not derecognised due to total return/asset swaps:					
Financial investments	231	(212)	–	–	–
Other financial assets not derecognised:					
Trading assets	270		–	–	–
Loan assets	13	(13)	13	(13)	–
Total financial assets not derecognised	2,596	(1,322)	13	(13)	–

(1) Includes assets transferred under repurchase agreement liabilities or in return for the loan of other securities where there is no associated liability on the Consolidated Entity's Statements of financial position.

Note 37
Pledged assets and transfers of financial assets continued

The following tables provide a summary of financial assets that have been transferred in such a way that part or all of the transferred financial assets do not qualify for derecognition, together with the associated liabilities.

			FOR THOSE LIABILITIES THAT ONLY HAVE RECOURSE TO THE TRANSFERRED ASSETS		
	Carrying amount of transferred assets $m	Carrying amount of associated liabilities $m	Fair value of transferred assets $m	Fair value of associated liabilities $m	Net fair value $m
					COMPANY 2023
Financial assets not derecognised due to repurchase and securities lending agreements:					
Trading assets[(1)]	**2,117**	**(459)**	**–**	**–**	**–**
Financial investments	**273**	**(271)**	**–**	**–**	**–**
Due from subsidiaries[(2)]	**13,972**	**(11,280)**	**–**	**–**	**–**
Financial assets not derecognised due to total return/asset swaps:					
Financial investments	**205**	**(189)**	**–**	**–**	**–**
Financial assets not derecognised due to securitisation:					
Loan assets[(3)]	**13,049**	**(10,484)**	**12,990**	**(10,419)**	**2,571**
Other financial assets not derecognised:					
Trading assets	**308**	**–**	**–**	**–**	**–**
Total financial assets not derecognised	**29,924**	**(22,683)**	**12,990**	**(10,419)**	**2,571**
					COMPANY 2022
Financial assets not derecognised due to repurchase and securities lending agreements:					
Trading assets[(1)]	1,191	(245)	–	–	–
Financial investments	884	(852)	–	–	–
Due from subsidiaries[(2)]	13,935	(11,269)	–	–	–
Financial assets not derecognised due to total return/asset swaps:					
Financial investments	231	(212)	–	–	–
Financial assets not derecognised due to securitisation:					
Loan assets[(3)]	13,894	(11,868)	13,894	(11,826)	2,067
Other financial assets not derecognised:					
Trading assets	270	–	–	–	–
Total financial assets not derecognised	30,405	(24,446)	13,894	(11,826)	2,067

(1) Includes assets transferred under repurchase agreement liabilities or in return for the loan of other securities where there is no associated liability on the Company's Statements of financial position.
(2) Represents the fair value of the SEs securitised bonds internally held by the Company which are pledged against repurchase agreement liabilities.
(3) Excludes $51,013 million (March 2022: $45,151 million) of securitised assets where the Company holds all of the instruments issued by the SEs.

Note 38
Audit and other services provided by PricewaterhouseCoopers

During the financial year, PricewaterhouseCoopers (PwC) and its network firms, the auditor of the Consolidated Entity and the Company, earned the following remuneration.

	CONSOLIDATED		COMPANY	
	2023 $'000	2022[1] $'000	**2023 $'000**	2022[1] $'000
Audit of the Group and controlled entities[2]:				
PwC – Australia	**19,359**	18,124	**17,767**	16,719
Network firms of PwC Australia	**7,085**	5,678	**1,188**	1,078
Total audit services	**26,444**	23,802	**18,955**	17,797
Audit-related services[3]:				
PwC – Australia	**20,964**	5,225	**18,694**	3,961
Network firms of PwC Australia	**154**	682	**82**	194
Total audit-related services	**21,118**	5,907	**18,776**	4,155
Total audit and audit-related services	**47,562**	29,709	**37,731**	21,952
Taxation services:				
PwC – Australia	**152**	307	**9**	164
Network firms of PwC Australia	**387**	784	**155**	226
Total taxation services	**539**	1,091	**164**	390
Other services:				
PwC – Australia	**536**	1,380	**443**	90
Network firms of PwC Australia	**252**	40	**223**	–
Total other services	**788**	1,420	**666**	90
Total other non-audit services	**1,327**	2,511	**830**	480
Total remuneration paid to PwC for audit, audit-related and other non-audit services	**48,889**	32,220	**38,561**	22,432

Use of PwC's services for engagements other than audit is restricted in accordance with the Consolidated Entity's *Audit and Assurance Independence Policy*. It is the Consolidated Entity's policy to seek competitive tenders for all major advisory projects and all non-audit services provided by PwC have been approved in accordance with its *Audit and Assurance Independence Policy*.

(1) Comparative information has been restated to conform to the presentation in the current year.
(2) Prior period includes:
- Consolidated Entity: additional fees of $1,704 thousand (2021: $867 thousand) for PwC Australia and $nil (2021: $1,242 thousand) for network firms of PwC Australia that related to the year ended 31 March 2022 but were incurred during the 2023 financial year
- Company: additional fees of $1,354 thousand (2021: $740 thousand) for PwC Australia and $nil (2021: $130 thousand) for network firms of PwC Australia that related to the year ended 31 March 2022 but were incurred during the 2023 financial year.

(3) Audit related services consist of assurance and related services traditionally performed by the independent external auditor of the Consolidated Entity. While in addition to their statutory audit role, these services are consistent with the role of the external auditor and include statutory assurance and other assurance services such as engagements required under regulatory, prudential, legislative or financing programmes as well as reviews requested by regulators and other agreed upon procedures.

Note 39
Acquisitions and disposals of subsidiaries and businesses

Acquisitions and Disposal of subsidiaries and businesses

Other than those disclosed in Note 27 *Related party information*, the Consolidated Entity did not acquire or sell any other subsidiaries or businesses during the current and previous financial year.

Note 40
Events after the reporting date

There were no material events subsequent to 31 March 2023 and up until the authorisation of the financial statements for issue, that have not been disclosed elsewhere in the financial statements.

Note 41
Significant accounting policies

(i) Principles of consolidation

Subsidiaries

The consolidated Financial Report reflects the financial performance and financial position of the Consolidated Entity. Subsidiaries are all those entities (including structured entities) which the Consolidated Entity controls. The Consolidated Entity controls an entity where it has:

- power to direct the relevant activities
- exposure, or rights, to variable returns
- the ability to utilise power to affect the entity's returns.

The determination of control is based on current facts and circumstances and is continuously assessed. The Consolidated Entity has power over an entity when it has existing substantive rights that provide it with the current ability to direct the entity's relevant activities, being those activities that significantly affect the entity's returns. The Consolidated Entity also considers the entity's purpose and design. If the Consolidated Entity determines that it has power over an entity, the Consolidated Entity then evaluates its exposure, or rights, to variable returns by considering the magnitude and variability associated with its economic interests.

All variable returns are considered in making that assessment including, but not limited to, returns from debt or equity investments, guarantees, liquidity arrangements, variable fees and certain derivative contracts. In certain instances, the Consolidated Entity has determined that it controls entities that it has less than half of the voting rights on the basis of its ability to direct the relevant activities of those entities.

Structured entities

Structured Entities (SEs) are those entities that have been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when voting rights relate to administrative tasks only and the relevant activities of the SE are directed by means of contractual arrangements. When assessing whether the Consolidated Entity controls (and therefore consolidates) a SE, judgement is required as to whether the Consolidated Entity has power over the relevant activities as well as exposure, or rights, to variable returns of the SE.

Where the Consolidated Entity has power over the SE's relevant activities, has assessed that its exposure to variable returns (through the residual risk associated with its involvement in SEs) is sufficient, and is able to affect its returns, the underlying assets, liabilities, revenues and expenses of these SEs are reported in the consolidated financial statements. Refer to Note 31 *Structured entities* for further information related to both consolidated and unconsolidated structured entities.

Consolidation

The effects of all transactions between subsidiaries in the Consolidated Entity are eliminated in full. Unrealised losses are eliminated in the same manner as unrealised gains but only to the extent that there is no evidence of impairment.

Non-controlling interests (NCI) in the results and equity of subsidiaries are shown separately in the consolidated Income statements, consolidated Statements of comprehensive income and consolidated Statements of financial position and are determined on the basis of the Consolidated Entity's present ownership interest in the entity.

Where control of an entity was obtained during the financial year, its results are included in the consolidated Income statements from the date on which control was obtained. Where control of an entity ceased during the financial year, its results are included for that part of the financial year during which control existed.

The Consolidated Entity determines the dates of obtaining control (i.e. acquisition date) and losing control (i.e. disposal date) of another entity based on an assessment of all pertinent facts and circumstances that affect the ability to direct the relevant activities and the extent of the Consolidated Entity's exposure to the entity's variable returns. Facts and circumstances that have the most impact include the contractual arrangements agreed with the counterparty, the manner in which those arrangements are expected to operate in practice and whether regulatory approval is required (including the nature of such approval). The acquisition or disposal date does not necessarily occur when the transaction is closed or finalised under law.

Subsidiaries held by the Company are carried in its financial statements at cost less accumulated impairments, adjusted for changes in fair value attributable to the spot foreign exchange risk where such subsidiaries are designated in qualifying fair value hedge relationships.

Interests in associates and joint ventures

Associates and joint ventures are entities over which the Consolidated Entity has significant influence or joint control. Existing ownership interests (including in-substance ownership interests) in associates and joint ventures are accounted for under the equity method. In-substance ownership interests are interests that are substantially similar to an investee's ordinary shares. Equity accounting of the ownership interests is applied from the date that the Consolidated Entity has significant influence or joint control and ceases when the Consolidated Entity no longer has significant influence or joint control.

Note 41
Significant accounting policies continued

(i) Principles of consolidation continued

The Consolidated Entity determines the dates of obtaining or losing significant influence or joint control of another entity based on an assessment of all pertinent facts and circumstances that affect the ability to significantly influence the financial and operating policies or jointly control the relevant activities of that entity. Facts and circumstances that have the most impact include the contractual arrangements agreed with the counterparty, the manner in which those arrangements are expected to operate in practice, and whether regulatory approval is required (including the nature of such approval). The acquisition or disposal date does not necessarily occur when the transaction is closed or finalised under law.

The equity method of accounting is applied in the consolidated Financial Report and requires the recognition of the Consolidated Entity's share of its associates' and joint ventures' post-acquisition profits or loss (including impairments of the associates' or joint ventures' assets) in the consolidated income statement, and the share of the post-acquisition movements in other comprehensive income in the consolidated statement of comprehensive income. Transactions reported directly in equity (besides those reflected in other comprehensive income) are accounted for by the Consolidated Entity in accordance with the substance of the transaction and whether the transaction is dilutive to the Consolidated Entity's ownership interest. Where the transaction is dilutive, the impact is recorded as part of the Consolidated Entity's share of profits or losses of associates and joint ventures.

Equity accounting of losses is restricted to the Consolidated Entity's interests in its associate or joint venture, unless the Consolidated Entity has an obligation or has made payment on behalf of the entity.

Long-term interests in an associate or joint venture, to which the equity method is not applied but in-substance form part of the net investment in the associate or joint venture, are accounted for in accordance with the Consolidated Entity's financial instruments' accounting policies, which includes accounting for expected credit losses, where applicable. Subsequently, the loss allocation and impairment requirements in AASB 128 *Investments in Associates and Joint Ventures* are applied to long-term interests.

At the end of each reporting period, management reviews the Consolidated Entity's investments in associates and joint ventures for indicators of impairment. Where there is an indicator of impairment, the carrying amount of the investment is tested for impairment by comparing its recoverable amount with its carrying value. Impairment losses are recognised in other impairment charges/reversals. A reversal of a previously recognised impairment loss is recognised only to the extent that the investment's carrying value does not exceed the carrying amount that would have been determined (including consideration of any equity accounted losses), if no impairment loss had been recognised.

Interests in associates and joint ventures are classified as held for sale when the Consolidated Entity determines that the interest will be recovered principally through a sale transaction rather than through continuing use. Equity accounting is suspended when the interest is classified as held for sale.

On disposal of an investment in an associate or a joint venture, the difference between the sales consideration, any retained interest and the carrying value is recognised as a gain or loss in investment income as part of other operating income and charges together with any gains and losses in OCI that related to the associate or joint venture.

Investments (including in-substance existing ownership interests) in associates and joint ventures held by the Company are carried in its financial statements at cost less accumulated impairment.

Changes in ownership interests

When acquiring additional interests:

- of a financial asset (such that it becomes an associate, joint venture or subsidiary), or
- in an investment in an associate or joint venture (such that it becomes a subsidiary), where the underlying entity constitutes a business,

previously held interests are revalued to their fair value and any gain or loss is recognised in investment income as part other operating income and charges.

Similarly, when selling ownership interests of a subsidiary (such that control is lost), or an investment in an associate or joint venture (such that it becomes a financial asset), retained ownership interests are revalued to their fair value and any gain or loss is recognised in investment income as part of other operating income and charges. Retained ownership interests are not revalued where the sale represents a contribution to an associate or joint venture.

Increases and decreases in the Consolidated Entity's interest in a subsidiary (that do not result in the loss of control) are accounted for directly within equity. Increases in the Consolidated Entity's ownership interest in an associate or joint venture are accounted for as an increase in the carrying value of the interest in associate or joint venture. The difference between the reduction in the Consolidated Entity's interest in an associate or joint venture that remains an associate or joint venture and the fair value of consideration received is accounted for as a gain or loss within investment income as part of other operating income and charges. A proportionate amount of associated OCI is reclassified to profit or loss, or reclassified within equity, as would otherwise be required on disposal of the underlying position.

Note 41
Significant accounting policies continued

(ii) Business combinations

Distinguishing between whether assets or a business is acquired involves judgement. The Consolidated Entity identifies a business where an acquired integrated set of activities and assets includes an economic resource (input) and a substantive process that together significantly contribute to the ability to provide goods or services to customers, generate investment income or other income from ordinary activities (outputs).

On a transaction-by-transaction basis, the Consolidated Entity may use a practical expedient to determine that an acquired set of activities is not a business. Under this assessment, the transaction is accounted for as an asset acquisition if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets.

Business combinations are accounted for using the acquisition method. The consideration exchanged is measured as the aggregate of the acquisition-date fair values of assets transferred, equity instruments issued, and liabilities incurred. Transaction costs of a business combination are recognised directly in the consolidated income statement as part of other operating expenses.

Identifiable assets acquired, and liabilities and contingent liabilities assumed in a business combination are measured at fair value on the acquisition date. The Consolidated Entity elects, on a transaction-by-transaction basis, to initially measure NCI either at fair value or at the NCI's proportionate share of the fair values of the identifiable assets and liabilities.

Goodwill is measured as the excess of the consideration exchanged, recognised NCI, and the fair value of previously held equity interests over the fair value of the identifiable net assets of the business acquired and is recognised as part of intangible assets. Goodwill is subsequently measured at cost less accumulated impairment.

If the consideration is less than the Consolidated Entity's share of the fair value of the identifiable net assets of the business acquired, the difference is recognised in investment income as part of other operating income and charges, but only after a reassessment of the identification and measurement of the net assets acquired.

Contingent consideration that is dependent on any subsequent event is measured at fair value with changes in its fair value recognised in investment income as part of other operating income and charges.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present values as at the acquisition date. The discount rate used is the Consolidated Entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Combinations between entities or businesses under common control

Common control transactions, which are business combinations involving entities or businesses that are ultimately controlled by the same parent entity, are accounted for at book value.

Where the Consolidated Entity acquires, as part of a common control transaction, assets that meet the definition of a business, the assets and liabilities acquired are recorded using the book values included in the consolidated financial statements of the entity having the highest level within the common control group and, where applicable, are presented gross of any accumulated amortisation, depreciation and impairment. The Consolidated Entity accounts for the difference between the consideration paid and the book value of the assets and liabilities acquired as a restructure reserve in equity, generally in retained earnings.

In the Consolidated Entity's financial statements, to the extent the common control transaction occurred between entities ultimately controlled by Macquarie Bank Limited, the selling entity's gains and losses relating to a common control transaction are eliminated against the amount recorded in the acquirer's equity relating to the common control transaction.

(iii) Foreign currency translation

Functional and presentation currency

The functional currency of each entity (including branches) in the Consolidated Entity is determined as the currency of the primary economic environment in which the entity operates. The Consolidated Entity and the Company's financial statements are presented in Australian dollars (the presentation currency), which is also the Company's functional currency.

Transactions and balances

At initial recognition, a foreign currency transaction is translated into the entity's functional currency using the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

At the end of each reporting period:

- foreign currency monetary assets and liabilities are translated using the closing exchange rate
- non-monetary items (including equity) measured in terms of historical cost in a foreign currency remain translated using the spot exchange rate at the date of the transaction
- non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date that the fair value was measured.

Note 41
Significant accounting policies continued

(iii) Foreign currency translation continued

Foreign exchange gains and losses arising from the settlement or translation of monetary items, or non-monetary items measured at fair value are recognised in net trading income, with one exception. Where such monetary items are designated as hedging instruments in qualifying cash flow hedge or net investment hedge relationships, the foreign exchange gains and losses may be deferred in OCI to the extent the hedge is effective (refer to Note 32 *Hedge accounting* and Note 41(x) *Derivative instruments and hedging activities*).

Subsidiaries and other entities

The results and financial position of all entities that have a functional currency other than Australian dollars are translated into Australian dollars as follows:

- assets and liabilities for each Statements of financial position presented are translated at the closing exchange rate at the date of that Statements of financial position. Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and are translated at the closing exchange rate
- income and expenses for each income statement are translated at actual or average exchange rates at the dates of the transactions
- all resulting exchange differences are recognised in OCI within a separate component of reserves, being the foreign currency translation reserve (FCTR).

Foreign currency gains and losses on intragroup loans are recognised in the income statement except where the loan is in-substance part of the Consolidated Entity's net investment in the foreign operation, in which case the foreign currency gains and losses are recognised in the Consolidated Entity's FCTR.

The exchange gains or losses recognised in FCTR are reclassified to the income statement or reattributed within equity as follows:

- if there is a disposal of a foreign operation, then the accumulated FCTR is reclassified from OCI to investment income within other operating income and charges
- if there is a partial disposal of a foreign operation that is an associate or joint arrangement, without loss of significant influence or joint control, then a proportionate share of the accumulated FCTR is reclassified to investment income
- if there is a partial disposal of a foreign operation that is a subsidiary, without loss of control, then a proportionate share of the accumulated FCTR is reattributed within equity to non-controlling interests.

(iv) Revenue and expense recognition

Net interest income

Interest income and interest expense (with the exception of borrowing costs that are capitalised on a qualifying asset which is not measured at fair value) are recognised using the effective interest rate (EIR) method for financial assets and financial liabilities carried at amortised cost, and debt financial assets classified as at fair value through OCI. The EIR method calculates the amortised cost of a financial instrument at a rate that discounts estimated future cash receipts or payments through the expected life of the financial instrument to the net carrying amount of the financial asset or liability. The calculation of the EIR does not include ECL. Fees and transaction costs that are integral to the lending arrangement are recognised in interest income or interest expense, as applicable, over the expected life (or, when appropriate, a shorter period) of the instrument in accordance with the EIR method.

When the estimates of payments or receipts of a financial instrument are subsequently revised, the carrying amount is adjusted to reflect the actual or revised cash flows with the remeasurement recognised as part of interest income (financial assets) or interest expense (financial liabilities).

The calculation of the EIR does not include ECL, except for financial assets which on initial recognition are classified as purchased or originated credit impaired (POCI). Interest income on these assets is determined using a credit adjusted EIR by discounting the estimated future cash receipts, including credit losses expected at initial recognition, through the expected life of the financial instrument to the net carrying amount of the financial asset.

Interest income on financial assets that are not credit-impaired is determined by applying the financial asset's EIR to the financial asset's gross carrying amount. Interest income on financial assets that are subsequently classified as credit-impaired (Stage III), is recognised by applying the EIR to the amortised cost carrying value (being the gross carrying value after deducting the impairment loss).

Interest income and expense on financial assets and liabilities that are classified as FVTPL is accounted for on a contractual rate basis.

Fee and commission income

Revenue earned by the Consolidated Entity from its contracts with customers primarily consists of the following categories of fee and commission income.

Brokerage and other trading-related fee income

The Consolidated Entity enters into contracts with customers to act as an agent to buy and sell securities. The brokerage and commission income related to this service is recognised on trade date and is presented net of any rebates.

Note 41
Significant accounting policies continued

(iv) Revenue and expense recognition continued

Service fee from related body corporates

Service fees for the provision of resources or other ancillary services to other Group entities, when the Company or its subsidiaries performs a service for other entities within the Macquarie Group as per the group shared services agreements, are recognised as and when those services are performed.

Other fee and commission income

Other fee and commission income includes fees earned on a range of banking products and services platforms, wealth services, credit cards, structuring fees, portfolio administration, lending services, stock borrow and lending activities and income on structured products which is recognised when the performance obligation is satisfied.

The revenue recognition policies above are applied to internal fee sharing arrangements between the entities within the Macquarie Group. Management fees and other cost recoveries are recognised as and when the Company performs a service to other entities within the Macquarie Group as per the agreed cost or profit sharing arrangements.

Net operating lease income

Operating lease income is recognised on a straight-line basis over the lease term and is presented net of the related depreciation expense.

Other operating income and charges

Other operating income and charges includes investment income, and other income.

Investment income includes gains and losses arising from subsequent changes in the fair values of equity and debt investment securities that are classified as FVTPL and dividends or distributions on these securities which represent the return on such investments. Impairment losses/reversal of impairment losses on these financial assets are not reported separately.

Gains or losses on the change of control, joint control and/or significant influence and reclassifications to/from held for sale also forms part of investment income. Refer to Note 41(i) *Principles of consolidation* for details on the timing of recognition of such gains or losses.

Dividends

Dividends or distributions are recognised when the right to receive a dividend or distribution is established, it is probable the economic benefits associated with the dividend will flow to the Company and/or Consolidated Entity and the dividend can be measured reliably.

Dividends or distributions from HFT assets are recognised in net trading income, as investment income as part of other operating income and charges for other financial assets measured at FVTPL or FVOCI, or as a reduction to the carrying amount of the investment in associates and joint ventures. Where associates and joint ventures are classified as held for sale, dividends or distributions are recognised within other income as part of other operating income and charges.

Judgement is applied in determining whether distributions from subsidiaries, associates and joint ventures are to be recognised as dividend income or as a return of capital. Distributions that represent a return of capital are accounted for by the Company as a reduction to the cost of its investment and are otherwise recognised by the Company within investment income as part of other operating income and charges when the recognition criteria are met.

Expenses

Expenses are recognised in the income statement as and when the provision of services is received.

(v) Segment reporting

Operating Segments are identified on the basis of internal reports to Senior Management about components of the Consolidated Entity that are regularly reviewed by Senior Management who have been identified as the chief operating decision makers, in order to allocate resources to the segment and to assess its performance. Information reported to Senior Management for the purposes of resource allocation and assessment of performance is specifically focused on core products and services offered, comprising three reportable segments as disclosed in Note 3 *Segment reporting*.

Information about products and services is based on the financial information used to produce the Consolidated Entity's financial statements. Information about geographical segments is based on the jurisdiction of the respective entities.

(vi) Taxation

The balance sheet approach to tax effect accounting has been adopted whereby the income tax expense for the financial year is the tax payable on the current year's taxable income adjusted for changes in deferred tax assets and liabilities attributable to temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements, and unused tax losses.

Deferred tax assets are recognised when temporary differences arise between the tax bases of assets and liabilities and their respective carrying amounts which give rise to a future tax benefit, or when a benefit arises due to unused tax losses. In both cases, deferred tax assets are recognised only to the extent that it is probable that future taxable amounts will be available against which to utilise those temporary differences or tax losses.

Deferred tax liabilities are recognised when such temporary differences give rise to taxable amounts that are payable in future periods. Deferred tax assets and liabilities are recognised at the tax rates expected to apply when the assets are recovered, or the liabilities are settled under enacted or substantively enacted tax law.

Note 41
Significant accounting policies continued

(vi) Taxation continued

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority.

Current tax assets and liabilities are offset when there is a legally enforceable right to offset and an intention to either settle on a net basis or realise the asset and settle the liability simultaneously.

Current and deferred taxes attributable to amounts recognised in OCI are also recognised in OCI.

The Consolidated Entity exercises judgement in determining whether deferred tax assets, particularly in relation to tax losses, are probable of recovery.

Factors considered include the ability to offset tax losses within the tax consolidated group in Australia or groups of entities in overseas jurisdictions, the nature of the tax loss, the length of time that tax losses are eligible for carry forward to offset against future taxable profits and whether future taxable profits are expected to be sufficient to allow recovery of deferred tax assets.

The Consolidated Entity undertakes transactions in the ordinary course of business where the income tax treatment requires the exercise of judgement. The Consolidated Entity estimates the amount expected to be paid to/(recovered from) tax authorities based on its understanding and interpretation of the law. Uncertain tax positions are presented as current or deferred tax assets or liabilities with reference to the nature of the underlying uncertainty.

Tax consolidation

The Consolidated Entity's Australian tax liabilities are determined according to tax consolidation legislation.

All eligible Australian resident wholly owned subsidiaries of Macquarie Group Limited (MGL, the Company's ultimate parent entity) comprise a tax consolidated group (TCG) with MGL as the head entity. As a consequence, the Company and the relevant subsidiaries are not liable to make income tax payments and do not recognise any current tax balances or any deferred tax assets arising from unused tax losses or credits.

The TCG recognises its current and deferred taxes using the 'group allocation approach' detailed in AASB UIG Interpretation 1052 *Tax Consolidation Accounting* (AASB Interpretation 1052). Under the terms and conditions of a tax funding agreement, MGL charges each subsidiary for all current tax liabilities incurred in respect of their activities and reimburses each subsidiary for any tax assets arising from unused tax losses. The tax funding agreement also allows for the transfer of tax balances between TCG entities as required. Where the recognition of a deferred tax balance in the transferee is precluded under AASB 112 *Income taxes*, the funding paid or received is accounted for in equity.

MGL's group allocation approach is based on a 'standalone taxpayer' approach as defined in AASB Interpretation 1052 which requires each subsidiary member to record income taxes as though they each continued to be a taxable entity in their own right. Modifications, such as the removal of the standalone tax effect of intra-group dividend income, are then made to this approach wherever it does not appropriately reflect the tax outcome to the TCG.

Should MGL be in default of its tax payment obligations, or a default is probable, the current tax balances of its subsidiaries will be determined in accordance with the terms and conditions of a tax sharing agreement between the MGL and entities in the tax consolidated group.

Goods and Services tax (GST)

Where GST (or other value added tax) is not recoverable from global tax authorities, it is either capitalised to the Statements of financial position as part of the cost of the related asset or is recognised as part of other operating expenses. Where GST (or other value added tax) is recoverable from or payable to global tax authorities, the amount is recorded as a separate asset or liability in the Statements of financial position.

(vii) Financial instruments

Recognition of financial instruments

Financial instruments are recognised when the Consolidated Entity becomes a party to the contractual provisions of the instrument.

A financial instrument is initially recognised at fair value and is adjusted (in the case of instruments not classified at FVTPL) for transaction costs that are incremental and directly attributable to the acquisition or issuance of the financial instrument, and fees that are an integral part of the effective interest rate. Transaction costs and fees paid or received relating to financial instruments carried at FVTPL are recorded in the income statement.

The best evidence of a financial instruments' fair value at initial recognition is its transaction price, unless its fair value is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique for which variables include only inputs from observable markets. Where such alternative evidence exists, the Consolidated Entity recognises profit or loss immediately when the instrument is recognised ('day 1 profit or loss'). When significant unobservable inputs are used to determine fair value, the day 1 profit or loss is deferred and is recognised in net trading income over the life of the transaction or when the inputs become observable.

Note 41
Significant accounting policies continued

(vii) Financial instruments continued

Financial instruments arising in multiple transactions are accounted for as a single arrangement if this best reflects the substance of the arrangement. Factors considered in this assessment include whether the financial instruments:

- are entered into at the same time and in contemplation of one another
- have the same counterparty
- relate to the same risk
- there is no apparent economic need or substantive business purpose for structuring the transactions separately that could not also have been accomplished in a single transaction, or
- whether each of the financial instruments has its own terms and conditions and may be transferred or settled separately.

Derecognition of financial instruments

Financial assets

Financial assets are derecognised from the Statements of financial position when:

- the contractual rights to cash flows have expired, or
- the Consolidated Entity has transferred the financial asset such that it has transferred substantially all the risks and rewards of ownership of the financial asset.

A financial asset is transferred if, and only if, the Consolidated Entity:

(i) transfers the contractual rights to receive the cash flows of the financial asset, or

(ii) retains the contractual rights to receive the cash flows of the financial asset, but assumes a contractual obligation to pay the cash flows to one or more recipients in an arrangement where the Consolidated Entity is:
  - not obligated to pay amounts to the eventual recipients unless it collects equivalent amounts from the original asset
  - prohibited from selling or pledging the original asset other than as security to the eventual recipients, and
  - obligated to remit any cash flows it collects on behalf of the eventual recipients without material delay.

In transactions where the Consolidated Entity neither retains nor transfers substantially all the risks and rewards of ownership of a financial asset, the asset is derecognised if control over the asset is lost. Any interest in the transferred and derecognised financial asset that is created or retained by the Consolidated Entity is recognised as a separate asset or liability.

In transfers where control over the asset is retained, the Consolidated Entity continues to recognise the asset to the extent of its continuing involvement as determined by the extent to which it is exposed to changes in the value of the transferred asset.

Financial liabilities

Financial liabilities are derecognised from the Statements of financial position when the Consolidated Entity's obligation has been discharged, cancelled or has expired.

Gains and losses on the derecognition of debt financial assets and liabilities

Gains and losses arising from the derecognition of debt financial assets or financial liabilities are recognised in:

- net trading income in respect of trading-related balances that are subsequently measured at amortised cost
- investment income within other operating income and charges in respect of financial investments and loans to associates, and
- other income and charges as part of other operating income and charges for all other financial assets and financial liabilities.

Financial guarantee contracts issued

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- the amount determined in accordance with the expected credit loss model under AASB 9, or
- the amount initially recognised less, where appropriate, the cumulative amount of income recognised in accordance with the principles of AASB 15 *Revenue from Contracts with Customers*.

Modification of financial instruments

A financial instrument is modified when its original contractual cash flows are renegotiated or modified. A financial asset that is renegotiated is derecognised if the rights to receive cash flows from the existing agreement have expired, either through replacement by a new agreement or the existing terms are modified to that effect. A financial liability that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms or if the existing terms are modified such that the renegotiated financial instrument is a substantially different financial instrument. Where the modification results in derecognition of the original financial instrument, the new financial instrument is recorded initially at its fair value and the resulting difference is recognised in the income statement in accordance with the nature of the financial instrument as described in the derecognition of financial instruments policy.

For financial instruments measured at amortised cost, and for debt financial assets measured at FVOCI, when the modification does not result in derecognition, the gross carrying amount of the financial instrument is recalculated and a modification gain or loss is recognised in the income statement. The gain or loss is measured as the adjustment of the gross carrying amount to reflect the renegotiated or modified contractual cash flows, discounted at the instrument's original EIR.

Note 41
Significant accounting policies continued

(vii) Financial instruments continued

Classification and subsequent measurement

Financial assets

Financial assets are classified based on the business model within which the asset is held and on the basis of the financial asset's contractual cash flow characteristics.

Business model assessment

The Consolidated Entity uses judgement in determining the business model at the level that reflects how groups of financial assets are managed together to achieve a particular business objective. In determining the business model, all relevant evidence that is available at the date of the assessment is used including:

- how the performance of the business model and the financial assets held within that business model is evaluated and reported to the Consolidated Entity's Senior Management personnel and senior executives
- the risks that affect the performance of the business model (and the financial assets held within that business model) and, in particular, the way in which those risks are managed, and
- how managers of the business are compensated (for example, whether the compensation is based on the fair value of the assets managed or on the contractual cash flows collected).

Solely payment of principal and interest (SPPI)

The contractual cash flows of a financial asset are assessed to determine whether these represent SPPI on the principal amount outstanding consistent with a basic lending arrangement. This includes an assessment of whether the cash flows primarily reflect consideration for the time value of money and credit risk of the principal outstanding. Interest may also include consideration for other basic lending risks and costs.

Amortised cost

A financial asset is subsequently measured at amortised cost using the EIR method where:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows,
- the contractual terms of the financial asset give rise on specified dates to cash flows that meet the SPPI requirements, and
- the financial asset has not been classified as DFVTPL.

Interest income is determined in accordance with the EIR method and recognised as part of interest and similar income.

Fair value through other comprehensive income

A financial asset is subsequently measured at FVOCI if the following conditions are met:

- the financial asset is held within a business model whose objective is to both collect contractual cash flows and to sell the financial assets
- the contractual terms of the financial asset give rise on specified dates to cash flows that meet the SPPI requirements
- the financial asset has not been classified as DFVTPL.

Subsequent changes in fair value are recognised in OCI, with the exception of interest (which is recognised as part of interest income), ECL (which is recognised in credit and other impairment charges/reversal) and foreign exchange gains and losses (which are recognised in net trading income) and is net of any related hedge accounting adjustments. When debt financial assets classified as at FVOCI are derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from OCI to investment income in respect of debt financial investments and loans to associates, or to other income and charges as part of other operating income and charges for all other financial assets.

Fair value through profit or loss

Financial assets that do not meet the criteria to be measured at amortised cost or FVOCI are subsequently measured at FVTPL. For the purposes of the Consolidated Entity's financial statements, the FVTPL classification consists of the following:

- financial assets that are held for active trading (held for trading (HFT)). This classification includes all derivative financial assets, except those that are designated as hedging instruments in qualifying hedge relationships and are classified as FVTPL
- financial assets in a business model whose objective is achieved by managing the financial assets on a fair value basis in order to realise gains and losses as opposed to a business model in which the objective is to collect contractual cash flows (FVTPL)
- financial assets that fail the SPPI test (FVTPL), and
- financial assets that have been designated to be measured at fair value through profit or loss to eliminate or significantly reduce an accounting mismatch (DFVTPL).

Equity financial assets that are not held for active trading are measured at FVTPL. Subsequent changes in fair value are recognised as investment income within other operating income and charges.

Note 41
Significant accounting policies continued

(vii) Financial instruments continued

Subsequent changes in the fair value of debt financial assets measured at FVTPL are presented as follows:

- changes in the fair value of financial assets that are classified as HFT and financial assets managed on a fair value basis are recognised in net trading income
- changes in the fair value of debt financial investments and loans to associates and joint ventures that fail SPPI are recognised in investment income as part of other operating income and charges
- changes in the fair value of all other FVTPL and DFVTPL financial assets are recognised as part of other income and charges within other operating income and charges.

Where applicable, the interest component of these financial assets is recognised as interest and similar income.

Reclassification of financial instruments

The Consolidated Entity reclassifies debt financial assets when and only when its business model for managing those assets changes. Financial assets that are reclassified are subsequently measured based on the financial asset's new measurement category.

The Consolidated Entity does not reclassify financial liabilities after initial recognition.

Financial liabilities

Financial liabilities are subsequently measured at amortised cost, unless they are either HFT, or have been designated to be measured at FVTPL (DFVTPL). A financial liability may be DFVTPL if:

- such a designation eliminates or significantly reduces an accounting mismatch that would otherwise have arisen
- a group of financial liabilities, or financial assets and financial liabilities, is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, or
- the liability contains embedded derivatives which must otherwise be separated and carried at fair value.

All derivative financial liabilities are classified as HFT, except those that are designated as hedging instruments in qualifying hedge relationships and are classified as FVTPL. Refer to Note 41(x) *Derivative instruments and hedging activities* for the detailed hedge accounting policy.

Changes in the fair value of financial liabilities that are not classified as HFT, with the exception of changes relating to the Consolidated Entity's own credit risk are recognised in net trading income, or other income and charges as part of other operating income and charges, depending on the nature of the transaction. Changes in fair value relating to changes in the Consolidated Entity's own credit risk are presented separately in OCI and are not subsequently reclassified to profit or loss.

Where applicable, the interest component of these financial liabilities is recognised as interest and similar expense.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount reported in the Statements of financial position, when there is a current legally enforceable right to offset the amounts and either there is an intention to settle on a net basis or realise the financial asset and settle the financial liability simultaneously.

(viii) Cash collateral on securities borrowed and lent and repurchase and reverse repurchase agreements

As part of its trading and financing activities, the Consolidated Entity borrows and lends securities, commodities and other assets ('underlying') on a collateralised basis. The underlying that is subject to the arrangement is not derecognised from the Statements of financial position of the relevant parties, as the risks and rewards of ownership remain with the initial holder.

These transactions include:

- reverse repurchase transactions, where the Consolidated Entity purchases an underlying under an agreement to resell
- repurchase transactions, where the Consolidated Entity sells an underlying under an agreement to repurchase.

The Consolidated Entity continually reviews the fair values of the underlying on which the above transactions are based and where appropriate, requests or provides additional collateral to support the transactions, in accordance with the terms of the respective agreements.

Reverse repurchase agreements are measured as follows by the Consolidated Entity:

- agreements that are collateralised with commodities are measured at amortised cost when they are held in a business model to collect contractual cash flows and AASB 9's SPPI criteria are met
- agreements that are held within the Consolidated Entity's cash and liquid assets portfolio are measured at FVOCI as they are held in a business model to both collect contractual cash flows and with the intention to sell
- all other reverse repurchase agreements are measured at FVTPL to reflect the Consolidated Entity's business model to realise fair value gains and losses as opposed to a business model in which the objective is to collect contractual cash flows.

Also refer to Note 34 *Measurement categories of financial instruments*.

Repurchase agreements are subsequently measured at amortised cost, except where they are DFVTPL to eliminate an accounting mismatch created by managing the agreements together with the associated reverse repurchase agreements that are measured at FVTPL.

Note 41
Significant accounting policies continued

(ix) Trading assets and liabilities

The Consolidated Entity uses trade date accounting when recording regular way purchases and sales of financial assets and liabilities that are classified as HFT. At the date a purchase transaction is entered into (trade date), the Consolidated Entity recognises the resulting financial asset or liability and any subsequent unrealised gain or loss arising from revaluing that contract to fair value as part of net trading income, except for interest income on HFT debt financial assets which is recognised in interest income. Refer to Note 41(vii) *Financial instruments*.

Trading assets (long positions) comprise financial instruments such as debt and equity securities, bank bills, treasury notes, and loans, commodity contracts and commodities purchased with the intent of being actively traded either individually or as part of a portfolio.

Trading liabilities comprise obligations to deliver assets (short positions) across the same trading categories and which the Consolidated Entity intends to actively trade.

Commodity inventory is recognised when the Consolidated Entity controls the commodity, the determination of which includes consideration of price risk, and is measured at fair value less costs to sell in accordance with the broker-trader exemption, on the basis that such assets are acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker-traders' margin.

When the Consolidated Entity becomes party to a sale contract, and the derecognition criteria are met (refer to Note 41(vii) *Financial instruments*), it derecognises the trading asset or liability and recognises a trade receivable or trade payable from trade date until settlement date.

(x) Derivative instruments and hedging activities

Derivative instruments entered into by the Consolidated Entity include futures, forwards and forward rate agreements, swaps and options in the interest rate, foreign exchange, commodity, credit and equity markets. These derivative instruments are principally used by the Consolidated Entity for the purposes of risk management of existing financial assets and liabilities and forecast transactions and are also entered into for client trading purposes.

Derivatives are recognised in the Statements of financial position as an asset where they have a positive fair value at the reporting date or as a liability where they have a negative fair value at the reporting date.

Derivatives that may have both positive or negative values must meet both the asset and liability derecognition tests before being derecognised from the Statements of financial position.

Fair values are obtained from quoted prices in active markets where available, or valuation techniques including discounted cash flow models and option pricing models, as appropriate. The accounting for derivatives is subject to the application of the day 1 profit or loss policy as described in Note 41(vii) *Financial instruments*.

The Consolidated Entity applies trade date accounting to the recognition and derecognition of derivative financial instruments.

Hedge accounting

As part of its ongoing business, the Consolidated Entity is exposed to several financial risks, principally that of interest rate, foreign exchange rate and commodity price risk (collectively referred to as the hedged risk or exposure). The Consolidated Entity has limited appetite for such risks and has policies and practices in place to ensure that these risks are effectively managed. The Consolidated Entity mitigates these risks through the use of derivative financial instruments, and, in the case of foreign currency risk, foreign-denominated debt issued (collectively referred to as hedging instruments). The Consolidated Entity applies hedge accounting to manage accounting mismatches arising from the difference in measurement bases or location of the gains and losses recognised between the exposure that is being hedged and the hedging instrument. Refer to details provided in the table on the following page.

Note 41
Significant accounting policies continued

(x) Derivative instruments and hedging activities continued

	Fair value hedge	Cash flow hedge	Net investment hedge
Nature of hedge	The hedge of the fair value risk of a financial or non-financial asset or liability.	The hedge of the change in cash flows of a financial asset or liability.	The hedge of changes in the Consolidated Entity's foreign denominated net assets for changes in foreign currency rates.
Nature of material hedged risks	• Interest rate risk • Commodity price risk • Foreign exchange risk.[1]	• Interest rate risk • Foreign exchange risk.	• Foreign exchange risk.
Material hedged items	• Fixed interest rate financial assets and liabilities • Property, Plant and Equipment • Investment in subsidiaries.[1]	• Floating interest rate financial liabilities • Highly probably forecast floating interest rate financial liabilities • Foreign currency denominated interest bearing financial liabilities.	• Net investment in foreign operations.
Material hedging instruments	• Interest rate swaps • Cross currency swaps • Commodity forwards and futures • Foreign exchange forwards and swaps • Foreign currency denominated borrowings.[1]	• Interest rate swaps • Cross currency swaps • Foreign currency denominated borrowings.	• Foreign exchange contracts • Foreign currency denominated issued debt.
Designation and documentation	At inception of the hedge relationship, documentation is required of the risk management objective and strategy for the hedge, the hedging instrument, hedged item, hedged risk and how the hedge relationship will meet the hedge effectiveness requirements.		
Hedge effectiveness method	All hedge relationships are assessed for prospective hedge effectiveness both at the inception of the hedge, at each reporting period and following any significant change in circumstances affecting the hedge, by demonstrating that: • an economic relationship exists between the hedged item and the hedging instrument • credit risk does not dominate the changes in value of either the hedged item or the hedging instrument • the hedge ratio is reflective of the Consolidated Entity's risk management approach. The hedge effectiveness assessment is performed by a combination of qualitative and, where applicable, quantitative assessments. Changes in the hedge ratio, or rebalancing, may be required to adjust the designated quantities of either the hedged item or the hedging instrument.		
Accounting treatment for the hedging instrument	Fair value through the income statement, aligned to the presentation of the hedged item.	Fair value through the cash flow hedge reserve as part of OCI, and then recognised in the income statement at the time at which the hedged item affects the income statement for the hedged risk.	Foreign exchange gains and losses are recognised in the Net Investment Hedge Reserve (NIHR), a separate component of FCTR in OCI.
Accounting treatment for the hedged item	Adjustments to the carrying value are recognised in the income statement for changes in fair value attributable to the hedged risk.	Accounted for on an amortised cost basis.	Foreign exchange gains and losses are recognised in the Consolidated Entity's foreign currency translation reserve as part of OCI.

(1) The Company (but not the Consolidated Entity) designates selected hedge accounting relationships that only meet the qualifying criteria for hedge accounting in the Company financial statements.

Note 41
Significant accounting policies continued

(x) Derivative instruments and hedging activities continued

	Fair value hedge	Cash flow hedge	Net investment hedge
Accounting treatment for hedge ineffectiveness	Recognised as part of net trading income in the income statement to the extent that changes in fair value of the hedged item attributable to the hedged risk are not offset by changes in fair value of the hedging instrument.	Recognised as part of net trading income in the income statement to the extent to which changes in the fair value of the hedging instrument exceed, in absolute terms, the change in the fair value of the hedged item.	
Accounting treatment if the hedge relationship is discontinued	Where the hedged item still exists and is a financial instrument carried at amortised cost, adjustments to the hedged item are amortised to the income statement on an EIR basis. For non-financial items, the adjustment continues as part of the carrying value of the asset up until it is recovered through use or sale, or the item becomes impaired.	The gain or loss remains in the cash flow hedge reserve to the extent that the hedged cash flows are still expected to take place and subsequently recognised in the income statement at the time at which the hedged item affects the income statement for the hedged risk. Where the hedged cash flows are no longer expected to take place, the gain or loss in the cash flow hedge reserve is recognised immediately in the income statement.	The exchange gains or losses recognised in the NIHR within FCTR are reclassified to the income statement or reattributed within equity as follows: • if the hedge is discontinued due to a disposal of the hedged foreign operation, then the accumulated NIHR is reclassified from OCI to investment income within other operating income and charges • if there is a partial disposal of a foreign operation that is an associate or joint arrangement, without loss of significant influence or joint control, then a proportionate share of the accumulated NIHR is reclassified to investment income • if there is a partial disposal of a foreign operation that is a subsidiary, without loss of control, then a proportionate share of the accumulated NIHR is reattributed within equity to non-controlling interests.
Other accounting policies	Certain components of the hedging instrument such as the forward element of a forward contract, the time value of an option and the foreign currency basis spread (being the liquidity charge for exchanging different currencies), may be excluded from the hedge designation. These elements are deferred in the cost of hedging reserve and released to the income statement either at the time at which the hedged exposure affects the income statement, or on a systematic basis over the life of the hedge.		

Note 41
Significant accounting policies continued

(xi) Margin money and settlement assets and liabilities

Margin money and settlement assets and liabilities includes trade settlement balances, margin monies and balances with clearing houses. Margin monies primarily represent deposits placed with clearing houses in relation to futures trading and other derivatives transactions. The balance includes both initial and variance margin which varies based on trading activities. The balance also includes client margin calls which are funded by the Consolidated Entity. Settlement balances represent outstanding trade timing balances as at the reporting date due to the timing difference between trade and settlement date. Balances are carried at amortised cost except for certain margin money balances that are held in money market funds and certain settlement balances which are carried at FVTPL.

(xii) Financial investments

Investment securities in this category include investments in equity or debt securities which are not actively traded by the Consolidated Entity.

Debt investment securities in this category comprise liquid asset holdings, bonds, money markets and other debt securities.

Financial investments are initially recognised on trade date at fair value (adjusted for directly attributable transaction costs for debt investments subsequently measured at amortised cost or FVOCI) and subsequently measured in accordance with Note 41(vii) *Financial instruments*.

(xiii) Loan assets

This category includes loans that are not held for trading purposes and typically includes the Consolidated Entity's lending activities to its customers.

Loan assets are initially recognised on settlement date at fair value (adjusted for directly attributable transaction costs for loan assets subsequently measured at amortised cost or FVOCI) and subsequently measured in accordance with Note 41(vii) *Financial instruments*.

Certain finance lease receivables are also presented as part of asset financing within loan assets. For the detailed policy on financial instruments, including treatment of derecognition, refer to Note 41(vii) *Financial instruments*.

(xiv) Property, plant and equipment and right-of-use assets

Property, plant and equipment are stated at historical cost (which includes, where applicable, directly attributable borrowing costs and expenditure directly attributable to the acquisition of the asset) less, accumulated depreciation and, where applicable, accumulated impairment losses.

Right-of-use (ROU) assets are initially measured at cost and comprise of the amount that corresponds to the amount recognised for the lease liability on initial recognition together with any lease payments made at or before the commencement date (less any lease incentives received), initial direct costs and restoration-related costs. Subsequently, it is stated at historical cost less accumulated depreciation and, where applicable, impairment losses, and adjusted for remeasurement of lease liabilities.

Property, plant and equipment and right-of-use assets includes assets leased out under operating leases.

Depreciation is the process to allocate the difference between cost and residual values over the estimated useful life. Where the residual value exceeds the carrying value, no depreciation is charged. Depreciation is calculated on a straight-line basis.

A ROU asset is depreciated on a straight-line basis over the shorter of the asset's useful life and the lease term.

Annual depreciation rates are summarised below:

Property, plant and equipment	Depreciation rates
Buildings	2.5 to 3.3%
Furniture, fittings and leasehold improvements[1]	10 to 20%
Equipment	33%
Meters	5 to 36%
Telecommunications	24%
Other operating lease assets	2 to 25%

Useful lives, residual values and depreciation methods are reviewed annually and reassessed in the light of commercial and technological developments. Gains and losses on disposal are determined by comparing the proceeds with the asset's carrying amount and are recognised in other income as part of other operating income and charges.

The depreciation charge is recognised as part of:

- net operating lease income for assets given on operating lease
- occupancy expenses for corporate buildings
- non-salary technology expenses for technology assets
- net trading income for depreciation relating to leased assets held by trading related business for the purpose of facilitating trading activities
- other operating expenses for all other assets.

The Consolidated Entity does not recognise a ROU asset for short-term or low value leases, instead the expense is recognised over the lease term as appropriate as part of operating expenses.

(1) Where remaining lease terms are less than five years, leasehold improvements are depreciated over the remaining lease term.

Note 41
Significant accounting policies continued

(xv) Goodwill and other identifiable intangible assets

Goodwill

Goodwill is measured as the excess of consideration, recognised NCI, and the fair value of previously held equity interests over the fair value of the identifiable net assets of the business acquired. Goodwill arising from business combinations is included in intangible assets.

Other acquired identifiable intangible assets

At the time at which the Consolidated Entity determines that it has acquired a business, the Consolidated Entity identifies intangible assets that are required to be initially recognised at fair value. An intangible asset is considered to have an indefinite useful life where it is expected to contribute to the Consolidated Entity's net cash inflows indefinitely.

The following intangible assets are typically identified and recognised by the Consolidated Entity:

- licences and trading rights: generally carried at cost less accumulated impairment loss. Where no contractual or legal limitation exists, these assets are not amortised because they are considered to have an indefinite useful life
- customer and servicing contracts acquired with a finite useful life: carried at cost less accumulated amortisation and accumulated impairment loss. Amortisation is calculated over the period for which the customer relationship is expected to exist
- customer and servicing contracts with an indefinite useful life: carried at cost less accumulated impairment loss.

Certain other intangible assets held for trading, including emission certificates, are measured at fair value less costs to sell in accordance with the broker-trader exemption (on the basis that such assets are acquired with the purpose of selling in the near future and generating a profit from fluctuations in price or broker traders' margin).

Amortisation of intangible assets held by trading related business is recorded in net trading income and for others is recognised in other operating expenses. Impairments (reversal of impairments) of intangible assets are recognised in other impairment charges/reversal.

Software

Certain internal and external costs directly incurred in acquiring and developing certain computer software programmes are capitalised and amortised over the estimated useful life, usually a period of three to seven years on a straight-line basis. The capitalised software asset is subject to impairment testing on an annual basis.

Costs incurred on the maintenance of software is expensed as incurred and recognised in other operating expenses.

(xvi) Deposits

Deposits include customer deposits, business banking and home loan related deposits, deposits from financial institutions and other balances such as client monies. These deposits are initially recognised at fair value less directly attributable transaction costs and are subsequently measured at amortised cost.

(xvii) Other assets and liabilities

Contract assets, contract liabilities and capitalised expenses

Where the Consolidated Entity provides services to clients and the consideration is unconditional, a receivable is recognised. Where the consideration is conditional on something other than the passage of time, a contract asset is recognised. Both receivables and contract assets are assessed for impairment in accordance with AASB 9.

The Consolidated Entity, as permitted by AASB 15, has applied the practical expedient that allows for costs incurred to obtain a contract to be expensed as incurred where the amortisation period for any asset recognised would be less than 12 months. The Consolidated Entity also applies the practical expedient not to adjust consideration for the effects of a significant financing component, where the period between transferring a good or service and when the customer pays for that good or service is expected to be one year or less.

Contract liabilities relate to prepayments received from customers where the Consolidated Entity is yet to satisfy its performance obligation.

Non-current assets and liabilities of disposal groups classified as held for sale

This category includes assets and disposal groups (groups of assets to be disposed in a single transaction and directly associated liabilities) for which the carrying amount will be recovered principally through a sale or distribution transaction rather than continuing use. This includes assets and liabilities of businesses and subsidiaries, associates and joint ventures, other assets and liabilities, and subsidiaries that are acquired exclusively with a view to sell or distribute.

These assets and disposal groups are classified as held for sale when they are available for immediate sale in their present condition and the sale or distribution is highly probable, including that the sale or distribution is expected to occur within 12 months. Where there is a planned partial disposal of a subsidiary resulting in loss of control, but the Consolidated Entity retains an interest in the disposed subsidiary, the entire carrying value of the subsidiary's assets and liabilities is classified as held for sale.

Non-current assets and liabilities of disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Equity accounting, depreciation and amortisation is suspended when the held for sale criteria are met.

Note 41
Significant accounting policies continued

(xvii) Other assets and liabilities continued

An impairment loss is recognised for any initial or subsequent write down of the asset to fair value less costs to sell and is recognised in other impairment charges/reversal. A gain is recognised for any subsequent increase in fair value less costs to sell, limited to the cumulative impairment loss previously recognised. A gain or loss not previously recognised by the date of sale is recognised at the date of sale.

Financial assets and liabilities that are classified as held for sale are measured in accordance with the Consolidated Entity's financial instruments' policies.

Provisions and contingent liabilities

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation that has arisen as a result of past events and for which a reliable estimate can be made.

Contingent liabilities are either possible obligations whose existence will be confirmed only by uncertain future events, or they are present obligations where a transfer of economic resources is not probable or cannot be reliably measured. Contingent liabilities are not recognised on the balance sheet but are disclosed unless an outflow of economic resources is remote.

Contingent liabilities, which generally include letters of credit, performance-related contingents and guarantees are disclosed in Note 30 *Contingent liabilities and commitments*.

Employee benefit provisions

Employee benefit provisions are recognised by the Consolidated Entity as and when the service has been rendered after deducting amounts already paid. Liabilities for unpaid salaries, salary-related costs and provisions for annual leave are recorded in the Statements of financial position at the salary rates which are expected to be paid when the liability is settled. Provisions for long service leave and other long-term benefits are recognised at the present value of expected future payments to be made.

In determining this amount, consideration is given to expected future salary levels and employee service histories. Expected future payments are discounted to their net present value using discount rates on high quality corporate bonds, except where there is no deep market, in which case rates on Government securities are used. Such discount rates have terms that match as closely as possible the expected future cash flows.

Provisions for unpaid employee benefits are derecognised when the benefit is settled or is transferred to another entity and the Company and Consolidated Entity are legally released from the obligation and do not retain a constructive obligation.

Dividends

Where a dividend is declared by the Company's Board of Directors, the provision for the dividend is recognised in the Statements of financial position as a liability, with a corresponding reduction in retained earnings, on the declaration date. Where the Company's Board of Directors determine or resolve to pay a dividend, the liability and the corresponding reduction in retained earnings is recognised on the payment date.

(xviii) Borrowings

Borrowings includes loans and other payables due to banks and financial and non-financial institutions. These balances are subsequently measured at amortised cost.

(xix) Due to/from related body corporate entities and subsidiaries

Transactions between the Consolidated Entity and other related body corporate entities under common control of MGL and between the Company and its subsidiaries, principally arise from the provision of banking and other financial services, lending arrangements and acceptance of funds on deposit, the provision of management and administration services, facilities and accommodation and the provision of financial guarantees, and are accounted for in accordance with Note 41(iv) *Revenue and expense recognition* and Note 41(vii) *Financial instruments*.

Financial assets and financial liabilities are presented net where the offsetting requirements are met (Note 41(vii) *Financial instruments*), such that the net amount is reported in the Statements of financial position.

(xx) Debt issued

Debt issued includes debt securities issued by the Consolidated Entity. These balances are subsequently measured at either amortised cost or are DFVTPL and measured at fair value in accordance with the Consolidated Entity's accounting policy for financial instruments, refer to Note 41(vii) *Financial instruments*.

(xxi) Loan capital

Loan capital represents issued debt with terms and conditions that qualify for inclusion as capital under Australian Prudential Regulation Authority (APRA) Standards.

Capital instruments are first assessed to determine whether the Consolidated Entity is required to deliver cash or another financial asset on the occurrence of a contingent event that is considered genuine and beyond the control of both the issuer and the holder (such as Common Equity Tier 1 Trigger Events or Non-Viability Trigger Events). Where such a contingent event exists, then the Consolidated Entity does not have the unconditional right to avoid delivering cash or another financial asset and the capital instrument is classified as a financial liability. The financial liability is initially measured at fair value plus directly attributable transaction costs and is subsequently measured at amortised cost.

For compound instruments that have both equity and liability features, the liability component is initially measured at fair value plus directly attributable transaction costs (and is thereafter measured at amortised cost using the EIR method), with the residual being accounted for within the Consolidated Entity's equity.

Note 41
Significant accounting policies continued

(xxii) Impairment

Expected credit losses

The ECL requirements apply to financial assets measured at amortised cost or FVOCI, lease receivables, amounts receivable from contracts with customers, loan commitments, certain letters of credit and financial guarantee contracts issued that are not DFVTPL. The Consolidated Entity applies a three-stage approach to measuring the ECL based on changes in the financial asset's underlying credit risk and includes forward looking information (FLI).

The calculation of ECL requires judgement and the choice of inputs, estimates and assumptions. Refer to Note 12 *Expected credit losses* for further information. Outcomes within the next financial period that are different from management's assumptions and estimates could result in changes to the timing and amount of ECL to be recognised.

The ECL is determined with reference to the following stages:

(i) Stage I—12 month ECL

At initial recognition, and for financial assets for which there has not been a significant increase in credit risk (SICR) since initial recognition, ECL is determined based on the probability of default (PD) over the next 12 months and the lifetime losses associated with such PD, adjusted for FLI. Stage I also includes financial assets where the credit risk has improved and has been reclassified from stage II.

(ii) Stage II—Not credit-impaired

When there has been a SICR since initial recognition, the ECL is determined with reference to the financial asset's lifetime PD and the lifetime losses associated with that PD, adjusted for FLI. The Consolidated Entity exercises judgement in determining whether there has been a SICR since initial recognition based on qualitative, quantitative, and reasonable and supportable information that includes FLI. Detail on the Consolidated Entity's process to determine whether there has been a SICR is provided in Note 12 *Expected credit losses*.

Use of alternative criteria could result in significant changes to the timing and amount of ECL to be recognised. Lifetime ECL is generally determined based upon the contractual maturity adjusted, where appropriate, for prepayments, extension, call and similar options, of the financial asset. For revolving facilities, the Consolidated Entity exercises judgement based on the behavioural, rather than contractual characteristics of the facility type. Stage II may include financial assets where the credit risk has improved and has been reclassified from stage III.

(iii) Stage III—Credit-impaired

Financial assets are classified as Stage III where they are determined to be credit impaired, which generally matches the APRA definition of default. This includes exposures that are at least 90 days past due and where the obligor is unlikely to pay without recourse against available collateral.

The ECL for credit impaired financial assets is generally measured as the difference between the contractual and expected cash flows from the individual exposure, discounted using the EIR for that exposure. For credit-impaired exposures that are modelled collectively for portfolios of exposures, ECL is measured as the product of the lifetime PD, the loss given default (LGD) and the exposure at default (EAD), adjusted for FLI.

Presentation of ECL allowances

The ECL allowances are presented in the Statements of financial position as follows:

- loan assets, loans to related body corporate entities and subsidiaries, associates and joint ventures measured at amortised cost – as a deduction to the gross carrying amount
- loan assets, loans to associates and joint ventures, and debt financial investments measured at FVOCI – as a reduction in the FVOCI reserve within equity. The carrying amount of the asset is not adjusted as it is measured at fair value
- lease receivables, contract receivables and other assets measured at amortised cost – as a deduction to the gross carrying amount
- undrawn credit commitments and financial guarantees (not measured at FVTPL) – as a provision included in other liabilities.

When the Consolidated Entity concludes that there is no reasonable expectation of recovering cash flows from the financial asset, and all possible collateral has been realised, the financial asset is written off, either partially or in full, against the related provision. Recoveries of loans previously written off are recorded based on the cash received.

Impairment of interests in associates and joint ventures

The Consolidated Entity performs an assessment at each reporting date to determine whether there is any objective evidence that its interests in associates and joint ventures are impaired. The main indicators of impairment are significant changes with an adverse effect that have taken place in the technological market, economic or legal environment and a significant or prolonged decline in fair value below cost.

In making this judgement, the Consolidated Entity evaluates, among other factors, the normal volatility in share price and the period of time for which fair value has been below cost. If there is an indication that an investment in an associate or joint venture may be impaired, then the entire carrying amount of the investment in the associate or joint venture is tested for impairment by comparing the recoverable amount, being the higher of fair value less costs to sell and value-in-use, with its carrying amount.

Note 41
Significant accounting policies continued

(xxii) Impairment continued

Impairment losses recognised in the income statement for investments in associates and joint ventures are subsequently reversed through the income statement if there has been a change in the estimates used to determine the recoverable amount since the impairment loss was recognised. The impairment losses (reversal of impairments) on investments in associates and joint ventures are recognised in the income statement as part of other impairment charges/reversal.

Fair value less costs to sell is estimated using market-based approaches using revenues, earnings and assets under management and multiples based on companies deemed comparable as well as other publicly available information relevant to the business.

Value-in-use is calculated using pre-tax cashflow projections of operating revenue and expenses. Forecasts are extrapolated using a growth rate and discounted using a pre-tax discount rate incorporating market risk determinants, adjusted for specific risks related to the cash generating units, if any, and the environment in which it operates.

Impairment of investments in subsidiaries

Investments in subsidiaries in the Company's financial statements are reviewed annually for indicators of impairment or more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment is recognised in other impairment charges/reversal for the amount by which the investment's carrying amount exceeds its recoverable amount, being the higher of fair value less costs to sell and value-in-use. At each reporting date, investments in subsidiaries that have been impaired are reviewed for possible reversal of impairment. The amount of any reversal of impairment recognised must not cause the investment's carrying value to exceed its original cost.

Impairment of goodwill and other intangible assets; property, plant and equipment and right-of-use assets

Intangible assets with indefinite lives (goodwill and certain intangible assets) are not subject to amortisation but are tested annually for impairment, or more frequently if events or changes in circumstances indicate that the carrying amount may not be recoverable.

For intangible assets that have a finite useful life and property, plant and equipment and ROU assets, an assessment is made at each reporting date for indications of impairment.

Impairment losses are recognised in other impairment charges as part of other operating income and charges for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and value-in-use.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash-generating units). Intangible assets (other than goodwill) for which an impairment loss has been recognised are reviewed for possible reversal of the impairment at each reporting date. A reversal is recognised only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised for the asset in prior years.

In relation to businesses acquired and held for disposal, the individual business is treated as a cash generating unit. Assets associated with strategic business acquisitions are allocated to each of the Operating Segments (refer to Note 3 *Segment reporting*) and assessed for impairment.

(xxiii) Performance based remuneration

Share-based payments

The ultimate parent company, MGL operates share-based compensation plans, which include awards (including those delivered through the Macquarie Group Employee Retained Equity Plan (MEREP)) granted to employees under share acquisition plans. Information relating to these schemes is set out in Note 29 *Employee equity participation*.

The Consolidated Entity accounts for its share-based payments as follows:

Equity settled awards: The awards are measured at their grant date fair value and based on the number of equity instruments expected to vest. Expenses are recognised as part of employment expenses with reference to the vesting period of those awards. To the extent that the Consolidated Entity or Company does not compensate the ultimate parent for MEREP awards offered to its employees, a corresponding credit is recognised in contributed equity. To the extent the amount is paid in advance, a receivable due from the ultimate parent is recognised. The receivable is amortised to the income statement as share-based payment expense over the vesting period. MEREP receivable amounts are recognised and disclosed in Note 27 *Related party information*.

Performance hurdles attached to Performance Share Units (PSUs) under the MEREP are not taken into account when determining the fair value of the PSUs at the grant date. Instead, these vesting conditions are taken into account by adjusting the number of equity instruments expected to vest.

Note 41
Significant accounting policies continued

(xxiii) Performance based remuneration continued

Cash settled awards: The awards are measured at their grant date fair value and based on the number of instruments expected to vest. Expenses are recognised as part of employment expenses with reference to vesting period of those awards which are settled in cash. The award liability is measured with reference to the number of awards and the fair value of those awards at each reporting date.

Profit share remuneration

The Consolidated Entity recognises a liability and an expense for profit share remuneration to be paid in cash with reference to the performance period to which the profit share relates.

(xxiv) Leases

At the inception of a contract, the Consolidated Entity assesses whether a contract is, or contains, a lease. At inception, or on reassessment of a contract that contains a lease component, the Consolidated Entity allocates the consideration in the contract to each lease component unless an election is made to account for the lease and non-lease components as a single lease component.

(i) Accounting where the Consolidated Entity is the lessee

The Consolidated Entity leases office premises, commodity storage facilities, technology and other equipment for which contracts are typically entered into for fixed periods of 12 months to 15 years and may include extension options. Leases are recognised as an ROU asset (as explained in Note 41(xiv) *Property, plant and equipment and right-of-use assets*) and a corresponding liability at the commencement date, being the date the leased asset is available for use by the Consolidated Entity.

Lease liability

Lease liabilities are initially measured at the present value of the future lease payments at the commencement date, discounted using the interest rate implicit in the lease (or if that rate cannot be readily determined, the lessee's incremental borrowing rate). Lease payments are allocated between principal and interest expense. Interest expense is, unless capitalised on a qualifying asset which is not measured at fair value, recognised as part of interest and similar expense over the lease period on the remaining lease liability balance for each period. Any variable lease payments not included in the measurement of the lease liability are also recognised in the income statement in the period in which the event or condition that triggers those payments occurs.

Lease liabilities are remeasured when there is a change in future lease payments arising from a change in lease term, an assessment of an option to purchase the underlying asset, an index or rate, or a change in the estimated amount payable under a residual value guarantee.

When the lease liability is remeasured, a corresponding adjustment is made to the carrying value of the ROU asset, or, in the income statement, where the carrying value of the ROU asset has been reduced to zero.

Presentation

The Consolidated Entity presents ROU assets in Property, plant and equipment and right-of-use assets (refer to Note 13) and lease liabilities in Other liabilities (refer to Note 20) in the Statements of financial position.

(ii) Accounting where the Consolidated Entity is a lessor

Leases where the lessee has substantially all the risks and rewards incidental to ownership of the leased assets are classified as finance leases. All other leases are classified as operating leases.

Finance lease

Where finance leases are granted to third parties, the present value of the minimum lease payments plus an estimate of the value of any unguaranteed residual value is recognised as a receivable and included in loan assets.

The difference between the gross receivable and the present value of the receivable is unearned interest income. Lease receipts are discounted using the interest rate implicit in the lease. Interest income is recognised over the term of the lease using the EIR method, which reflects a constant rate of return. Finance lease income is presented within interest and similar income in the income statement.

Operating lease

Where the Consolidated Entity is the lessor under an operating lease, the underlying asset is carried at cost and depreciated over its useful life in accordance with the rates specified in Note 41(xiv) *Property, plant and equipment and right-of-use assets*. Operating lease income is recognised on a straight-line basis over the period of the lease unless another systematic basis is more appropriate. Assets leased out under operating leases are included in property, plant and equipment and right-of-use assets.

When the Consolidated Entity is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. The lease classification of the sublease is determined with reference to the ROU asset arising from the head lease.

Note 41
Significant accounting policies continued

(xxv) Contributed equity

Ordinary shares and other similar instruments are classified as equity. Incremental costs directly attributable to the issue of new shares are recorded in equity as a deduction, net of tax, from the issue proceeds.

(xxvi) Fiduciary assets and client money

The Consolidated Entity engages in trust, fund or other fiduciary activities as well as certain brokerage and other trading-related activities that result in the holding or placing of assets on behalf of third parties. Where such assets are controlled, and future economic benefits are expected to be realised by the Consolidated Entity, such assets and the income thereon are reflected in the Statements of financial position and income statement respectively.

Where this is not the case, these assets and the income thereon are excluded from the Consolidated Entity's financial statements as they are not the assets of the Consolidated Entity. Fee income earned by the Consolidated Entity relating to its responsibilities from fiduciary and brokerage and other trading-related activities is included as part of fee and commission income.

(xxvii) Cash and bank balances

Cash and bank balances includes currency on hand, demand deposits and short-term balances with Central and other banks including unallocated precious metal balances. These balances are subsequently measured at amortised cost, except unallocated precious metals which are held at FVTPL.

(xxviii) Cash and cash equivalents

Cash and cash equivalents comprise of cash and bank balances (except unallocated precious metal balances) as well as certain liquid financial investments and non-trading reverse repurchase agreements that have a contractual maturity of three months or less from the date of acquisition and which are readily convertible to known amounts of cash, are subject to an insignificant risk of changes in value, and are available to meet the Consolidated Entity's short-term cash commitments. Cash and cash equivalents exclude margin money balances, trading assets and certain client-related balances which are segregated from the Consolidated Entity's own funds and are thus restricted from use.

(xxix) Comparatives

During the financial year, the Consolidated Entity has re-presented information in the following matters:

- Undrawn commitments for certain retail banking products which despite being revocable have been considered to be exposed to credit risk and accordingly the comparative credit commitment exposures have been re-presented under Note 30 *Contingent liabilities and commitments* and Note 33 *Financial risk management* for the Consolidated Entity and the Company.
- Credit concentration in the Note 33.1 *Credit risk*, covering the geographical locations and counter party type for certain debt securities under Financial investment has been re-presented for the Consolidated Entity and the Company.
  Additionally, Credit quality in the Note 33.1 *Credit risk* for Loan assets has been re-presented for the Consolidated Entity and the Company to reflect a refinement in the methodology for portfolio grading.
- The Company's Statement of financial position has been re-presented for certain margin money balances in compliance with the accounting policy for fiduciary assets reducing the Margin money and settlement assets balances by $2,300 million offset by a decrease in Due to subsidiaries by $2,200 million and Due from subsidiaries by $100 million. This representation had no impact on net assets of the Company.

Where necessary, comparative information has been re-presented to conform to changes in presentation in the current year.

(xxx) Rounding of amounts

In accordance with *ASIC Corporations (Rounding in Financial/ Directors' Reports) Instrument 2016/191*, amounts in the Directors' Report and Financial Report have been rounded off to the nearest million Australian dollars unless otherwise indicated.

(xxxi) New Australian Accounting Standards and amendments to Australian Accounting Standards and Interpretations that are not yet effective for the financial year

(i) AASB 17 *Insurance Contracts*

AASB 17 *Insurance Contracts*, amends the accounting for insurance contracts and will replace AASB 4 *Insurance Contracts*, AASB 1023 *General Insurance Contracts* and AASB 1038 *Life Insurance Contracts*. The standard is mandatorily effective for the Consolidated Entity's annual reporting period beginning on 1 April 2023. Based on the Consolidated Entity's current business activities AASB 17 Insurance Contracts will not have a material impact on the Consolidated Entity's financial statements.

(ii) Other amendments made to existing standards

Other amendments to existing standards that are not mandatorily effective for the annual reporting period beginning on 1 April 2022 and have not been early adopted, are not likely to result in a material impact on the Consolidated Entity's financial statements.

Directors' declaration

Macquarie Bank Limited

In the Directors' opinion:

(a) the financial statements and notes set out on pages 71 to 203 are in accordance with the *Corporations Act 2001* (Cth), including:
   (i) complying with Australian Accounting Standards, and
   (ii) giving a true and fair view of the Company's and the Consolidated Entity's financial positions as at 31 March 2023 and their performance for the financial year ended on that date, and

(b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Note 1(i) includes a statement that the Financial Report complies with International Financial Reporting Standards.

The Directors have been given the declarations by the CEO and CFO required by section 295A of the *Corporations Act 2001* (Cth). This declaration is made in accordance with a resolution of the Directors.

Glenn Stevens AC
Independent Director and Chair

Stuart Green
Managing Director and Chief Executive Officer

Sydney
5 May 2023

Independent auditor's report

To the member of Macquarie Bank Limited

Report on the audit of the financial report

Our opinion

In our opinion:

The accompanying financial report of Macquarie Bank Limited (the Company) and its controlled entities (together the Consolidated Entity) is in accordance with the *Corporations Act 2001* (Cth), including:

(a) giving a true and fair view of the Company's and Consolidated Entity's financial positions as at 31 March 2023 and of their financial performance for the year then ended

(b) complying with Australian Accounting Standards and the *Corporations Regulations 2001* (Cth).

What we have audited

The Consolidated Entity and Company financial report comprises:

- the Consolidated and Company statements of financial position as at 31 March 2023
- the Consolidated and Company statements of comprehensive income for the year then ended
- the Consolidated and Company statements of changes in equity for the year then ended
- the Consolidated and Company statements of cash flows for the year then ended
- the Consolidated and Company income statements for the year then ended
- the notes to the financial statements, which include significant accounting policies and other explanatory information
- the directors' declaration.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial report* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

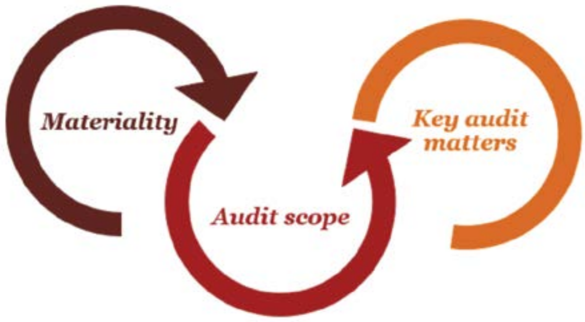
We are independent of the Company and the Consolidated Entity in accordance with the auditor independence requirements of the *Corporations Act 2001* (Cth) and the ethical requirements of the Accounting Professional & Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

Our audit approach for the Consolidated Entity

An audit is designed to provide reasonable assurance about whether the financial report is free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial report as a whole, taking into account the geographic and management structure of the Consolidated Entity, its accounting processes and controls and the industry in which it operates.

The Consolidated Entity is structured into two operating groups and a corporate segment. It undertakes operational activities that are important to the financial reporting process in multiple locations overseas, including sites in Gurugram in India, Jacksonville in the United States and Manila in the Philippines.



Consolidated Entity materiality

For the purpose of our audit we used overall Consolidated Entity materiality of $265 million, which represents approximately 5% of the Consolidated Entity's profit before tax.

We applied this threshold, together with qualitative considerations, to determine the scope of our audit and the nature, timing and extent of audit procedures and to evaluate the effect of misstatements on the financial report as a whole.

We chose Consolidated Entity profit before tax because, in our view, it is the benchmark against which the performance of the Consolidated Entity is most commonly measured.

We utilised a threshold of approximately 5% based on our professional judgement, noting it is within the range of commonly acceptable thresholds.

Consolidated Entity audit scope

Our audit focused on where the Consolidated Entity made subjective judgements; for example, significant accounting estimates involving assumptions and inherently uncertain future events. To identify these subjective judgements, we considered the inherent risks arising from its respective business operations, and how the Consolidated Entity manages these risks. We also considered a number of other factors including the design and implementation of the Consolidated Entity's control environment relevant to the audit, the appropriateness of the use of the going concern basis of accounting in the preparation of the financial report and the risk of management override of controls.

We aligned our audit to the Consolidated Entity's structure by instructing a component audit team for each of the two operating groups and the corporate segment. These component audit teams, in consultation with the group audit team, established an audit strategy tailored for each operating group and the corporate segment.

Given the extent of the overseas operations of the Consolidated Entity, the component audit teams instructed a number of other member firms of the PwC global network to perform audit procedures. The group audit team determined the level of supervision and direction it needed to have over the audit work performed by component audit teams, including the component audit teams' review and supervision of the overseas audit teams they, in turn, instructed.

The work performed by the component audit teams and the overseas audit teams, together with additional audit procedures performed by the group audit team such as procedures over the Consolidated Entity's consolidation and the financial report disclosures, provided us with the information we needed for our opinion on the Consolidated Entity's financial report as a whole.

Independent auditor's report

To the member of Macquarie Bank Limited continued

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report for the current period. The key audit matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. Further, any commentary on the outcomes of a particular audit procedure is made in that context. The key audit matters identified below relate to the audit of both the Consolidated Entity and the Company, and references to the Consolidated Entity also apply to the Company. We communicated the key audit matters to the Board Audit Committee.

<table>
<tr><th>Key audit matter</th><th>How our audit addressed the key audit matter</th></tr>
<tr><td colspan="2">Provision for expected credit losses on loan assets (Refer to Note 12)</td></tr>
<tr><td>Under the credit impairment model required by AASB 9: Financial Instruments (AASB 9), losses are recognised on an Expected Credit Loss (ECL) basis. ECLs are required to incorporate forward-looking information, reflecting the Consolidated Entity's view of potential future economic scenarios.

The global economic outlook remains uncertain. Significant regulatory intervention has been necessary in order to contain further crises in the financial sector. Rising interest rates and rising inflation continue to place pressure on the economies throughout the World, and the ongoing conflict in Europe shows little sign of resolution. As a result, significant judgement was required to be exercised by the Consolidated Entity in calculating the ECL. Specifically, this includes judgements around the use of forward-looking information, including developing macroeconomic scenarios and their associated weightings and the use of post model adjustments in the calculation of the ECL.

In order to meet the ECL requirements of AASB 9, the Consolidated Entity has developed models that involve judgement including determining assumptions such as defining a significant increase in credit risk (SICR). The ECL models of the Consolidated Entity rely on numerous data elements and certain post model adjustments are applied based on the Consolidated Entity's judgement.

Given the extent of judgement involved, we consider this to be a key audit matter.</td><td>Our procedures included assessing the design and testing the operating effectiveness of certain controls supporting the Consolidated Entity's estimate of the ECL including controls relating to:
• review, challenge and approval of certain forward-looking macroeconomic assumptions and scenario weightings, including specifically the consideration of impacts of rising inflation and interest rates
• monitoring of the effectiveness of models used to support ECL estimates, and the validation of new and revised models implemented
• assessment of the credit quality of counterparties
• accuracy of certain critical data elements used in key ECL models, and
• review and challenge forums to assess the ECL output and post model adjustments.

In addition to controls testing, we also performed substantive procedures including:
• together with PwC credit modelling experts, assessing the appropriateness of conclusions reached by the Consolidated Entity from model monitoring performed on key models. This included assessing key model components such as SICR and reperformance of certain tests performed as part of the model monitoring
• together with PwC credit modelling experts, testing the appropriateness of a selection of changes to key models
• together with PwC credit modelling experts, assessing whether the list of critical data elements identified by the Consolidated Entity was appropriate for key models
• together with PwC economics experts, assessing the appropriateness of relevant macroeconomic scenarios and certain forward-looking economic data developed by the Consolidated Entity
• test the completeness and accuracy of certain critical data elements used in key ECL models
• assessing a selection of post model adjustments identified by the Consolidated Entity, including developing an understanding of the methodology used for overlay derivation and testing the underlying datasets used for the calculations, and
• considering the impacts on the ECL events occurring subsequent to balance date.

For credit impaired loan (stage III) provisions, we examined a sample of individual loan exposures to consider the appropriateness of provisions recognised.

We assessed the reasonableness of the Consolidated Entity's disclosures in the financial report against the Australian Accounting Standards.</td></tr>
</table>

Key audit matter	How our audit addressed the key audit matter
Valuation of complex or illiquid financial instruments carried at fair value through profit and loss which are based on significant unobservable inputs (level 3 financial instruments) (Refer to Note 35)	
The Consolidated Entity exercises judgement in valuing certain financial assets and liabilities at fair value where there are significant unobservable inputs for the valuation of these assets and liabilities. These assets and liabilities are known as Level 3 financial instruments. For the Consolidated Entity, these Level 3 financial instruments predominantly consist of derivative financial instruments, trading assets, financial investments and loan assets. Judgement is required in estimating the fair value of these financial instruments in determining appropriate models, assumptions and inputs. Given the extent of judgement involved in valuing these Level 3 financial instruments, we considered this to be a key audit matter.	Our procedures included assessing the design and testing the operating effectiveness of certain controls relating to Level 3 financial instruments, including controls over: • approval and validation of the models adopted • accuracy of inputs to models • the price verification process performed by the Consolidated Entity using prices and model inputs sourced from third parties • calculation and approval of key valuation adjustments, and • governance, review and challenge forums. Together with PwC valuation experts, we tested the Consolidated Entity's estimate for a sample of level 3 derivative financial instruments and trading assets. We considered a sample of collateral disputes, gains and losses on disposals and other events to help assess the appropriateness of the valuations. We tested a sample of valuation adjustments at period end, including evaluating the methodology applied and underlying assumptions. For a sample of financial investments and loan assets, together with PwC valuation experts, we assessed the appropriateness of the valuation methodologies applied, as well as the appropriateness of significant inputs used, such as forecasts and comparable market information. For a sample of financial instruments, we tested the allocation of financial instruments to the appropriate level within the fair value hierarchy. We assessed the reasonableness of the Consolidated Entity's disclosures in the financial report against the requirements of Australian Accounting Standards.

Independent auditor's report

To the member of Macquarie Bank Limited continued

Key audit matter	How our audit addressed the key audit matter
IT systems and controls over financial reporting	
The Consolidated Entity's operations and financial reporting processes are heavily dependent on IT systems for the processing and recording of a significant volume of transactions. A fundamental component of these IT systems and controls is ensuring that risks in relation to inappropriate user access management, unauthorised program changes and IT operating protocols are managed. Due to this, we consider the operation of IT systems and controls over financial reporting to be a key audit matter.	For material financial statement balances we developed an understanding of the business processes, IT systems used to generate and support those balances and associated IT application controls and IT dependencies in manual controls. Our procedures included evaluating the design and testing the operating effectiveness, where relevant, of certain controls over the continued integrity of the IT systems that are relevant to financial reporting. This involved assessing, where relevant to the audit: • change management: the processes and controls used to develop, test and authorise changes to the functionality and configurations within systems; • system development: the project disciplines which ensure that significant developments or implementation are appropriately tested before implementation and that data is migrated/converted and transferred completely and accurately; • security: the access controls designed to enforce segregation of duties, govern the use of generic and privileged accounts or ensure that data is only changed through authorised means; and • IT operations: the controls over operations are used to ensure that any issues that arise are managed appropriately. Within the scope of our audit where technology services are provided by a third party, we obtained assurance through independent testing or, where available, considered assurance reports from the third party's auditor on the design and operating effectiveness of controls for the reporting period. We also carried out tests, on a sample basis, of IT application controls and IT dependencies in manual controls that were key to our audit testing in order to assess the accuracy of certain system calculations, the generation of certain reports and the operation of certain system enforced access controls. Where we identified design or operating effectiveness matters relating to IT systems or application controls relevant to our audit, we performed alternative or additional audit procedures, which included considering mitigating controls in order to respond to the impact on our overall audit approach.
Estimation of tax payable relating to tax uncertainties (Refer to Note 20)	
The Consolidated Entity is subject to taxation in a number of jurisdictions. The assessment of the amounts expected to be paid to tax authorities is considered initially by the Consolidated Entity in each local territory, and then reviewed centrally, with consideration given to particular tax positions in certain jurisdictions. In some cases, the treatment of tax positions requires judgement to estimate the ultimate amounts of tax that will be paid. Given the extent of judgement involved, we consider this to be a key audit matter.	Our procedures included evaluating the analysis conducted by the Consolidated Entity which sets out the basis for judgements made in respect of the ultimate amounts expected to be paid to tax authorities. Assisted by PwC tax experts, we read a risk focused selection of correspondence with tax authorities and external advice obtained by the Consolidated Entity and used our understanding of the business to assess the completeness and quantum of the provisions for tax. We considered the likelihood of additional tax exposures occurring based on our knowledge of tax legislation, applicable precedent and industry developments, noting the level of judgement involved. We assessed the reasonableness of the Consolidated Entity's disclosures in the financial report against the requirements of the Australian Accounting Standards.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report for the year ended 31 March 2023, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon through our opinion on the financial report. We have issued a separate audit opinion on the remuneration report.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the financial report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* (Cth) and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Company and the Consolidated Entity to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or the Consolidated Entity or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: **https://www.auasb.gov.au/admin/file/content102/c3/ar1_2020.pdf.** This description forms part of our auditor's report.

Report on the remuneration report

Our opinion on the remuneration report

We have audited the remuneration report included in pages 42 to 66 of the directors' report for the year ended 31 March 2023.

In our opinion, the remuneration report of Macquarie Bank Limited for the year ended 31 March 2023 complies with section 300A of the *Corporations Act 2001* (Cth).

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the remuneration report in accordance with section 300A of the *Corporations Act 2001* (Cth). Our responsibility is to express an opinion on the remuneration report, based on our audit conducted in accordance with Australian Auditing Standards.

PricewaterhouseCoopers

PricewaterhouseCoopers

K. Stubbins

Kristin Stubbins
Partner

Sydney
5 May 2023

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